

```
Db      61 IIGNGSFLTKGPSKLNDRADSRRLMDQGNPFLIIKNLIKIEDSTYICEVEDQKEEYQL 120
Qy      121 LVFGLTANSPTHTLLOGOSLTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELQDSG 180
Db      121 LVFGLTANSPTHTLLOGOSLTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELQDSG 180
Qy      181 TWTCTVLQNOQKKEVEFKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFTVEKLTGSGELMW 240
Db      181 TWTCTVLQNOQKKEVEFKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFTVEKLTGSGELMW 240
Qy      241 QAEERASSSKSWITFDLKNKEVSVKRVTDPKLOMGKKLPLHLTLPOALPOYAGSGLTLTA 300
Db      241 QAEERASSSKSWITFDLKNKEVSVKRVTDPKLOMGKKLPLHLTLPOALPOYAGSGLTLTA 300
Qy      301 LEAKTGKLEHVEVNLVVMRAATOLQKNLTCEVWGPTSKMLSLKLENKEAKVSKREKPVWV 360
Db      301 LEAKTGKLEHVEVNLVVMRAATOLQKNLTCEVWGPTSKMLSLKLENKEAKVSKREKPVWV 360
Qy      361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTP----- 393
Db      361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPEASTKGSVFPFLAPSSKSTSGG 420
Qy      394 ----- 393
Db      421 TAALGLVKDYFPEPVTWSNMGALTSGVHTFPAVLQSSGLYSLSVTVPPSSSLGTQTY 480
Qy      394 -----VERKSCDKHTTCPCRPAPRLGGSVLFPPPKKDTLMISRTPE 437
Db      481 ICNVNKHPSNTKVDKKVEPKSCDKHTTCPCRPAPRLGGSVLFPPPKKDTLMISRTPE 540
Qy      438 VTCVVVDVSHEDPEVKFNNYVVDGVEVHNAKTKRREQYSTYRVVSVLTVLHQDMLNGKE 497
Db      541 VTCVVVDVSHEDPEVKFNNYVVDGVEVHNAKTKRREQYSTYRVVSVLTVLHQDMLNGKE 600
Qy      498 YKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIA 557
Db      601 YKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIA 660
Qy      558 VEVESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDSRWQOGNVSCSVMEHALNHNHTQ 617
Db      661 VEVESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDSRWQOGNVSCSVMEHALNHNHTQ 720
Qy      618 KSLSLSPG 625
Db      721 KSLSLSPG 728

RESULT 8
AAVS1078
ID AAVS1078 standard; protein; 729 AA.
XX
AC AAVS1078,
XX
DT 23-MAR-2000 (first entry)
XX
DE Human fusion protein CD4H-1.
XX
KW Fusion protein; human; CD4; IgG1; immunoglobulin; gp120;
KW anti-human immunodeficiency virus; CD4H-1.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN US6004781-A.
XX
PD 21-DEC-1999.
XX
PF 04-FEB-1994; 94US-00191708.
XX
PR 22-JAN-1988; 88US-00147351.
PR 23-JAN-1989; 89US-00295966.
PR 09-JUN-1992; 92US-0086781.
PR 12-APR-1993; 93US-00057952.
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XX
PA (GENO ) GEN HOSPITAL CORP.
XX
PI Seed B;
XX
DR WPI; 2000-085792/07.
XX
DR N-PSDB; AA244061.
XX
PT Fusion protein useful for the treatment of human immunodeficiency virus.
XX
PS Example 1; Col 15-30; 39pp; English.
XX
CC This invention describes a novel nucleic acid (I) encoding a fusion
CC protein comprising a DNA sequence encoding amino acids 1-173 of CD4 (II)
CC and a DNA sequence encoding a human immunoglobulin (Ig) heavy or light
CC chain (III). The products of the invention have anti-human
CC immunodeficiency virus (HIV) activity and are capable of binding to
CC gp120. The fusion protein is useful for treating human immunodeficiency
CC virus (HIV) or simian immunodeficiency virus (SIV). This sequence
CC represents the fusion protein CD4H-1 which is constructed from CD4 linked
CC to human IgG1 upstream of the CH1 region
XX
SQ Sequence 729 AA;
XX
Query Match 94.0%; Score 3209.5; DB 3; Length 729;
Best Local Similarity 85.6%; Pred. No. 3.5e-167;
Matches 623; Conservative 0; Mismatches 2; Indels 103; Gaps 1;

Qy      1 NMRGVPFRLHLVLVLOLALPAATQGNKVLGKKGDVETLTASQKSIQFMKNSNQIX 60
Db      1 NMRGVPFRLHLVLVLOLALPAATQGNKVLGKKGDVETLTASQKSIQFMKNSNQIX 60
Qy      61 IIGNGSFLTKGPSKLNDRADSRRLMDQGNPFLIIKNLIKIEDSTYICEVEDQKEEYQL 120
Db      61 IIGNGSFLTKGPSKLNDRADSRRLMDQGNPFLIIKNLIKIEDSTYICEVEDQKEEYQL 120
Qy      121 LVFGLTANSPTHTLLOGOSLTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELQDSG 180
Db      121 LVFGLTANSPTHTLLOGOSLTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELQDSG 180
Qy      181 TWTCTVLQNOQKKEVEFKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFTVEKLTGSGELMW 240
Db      181 TWTCTVLQNOQKKEVEFKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFTVEKLTGSGELMW 240
Qy      241 QAEERASSSKSWITFDLKNKEVSVKRVTDPKLOMGKKLPLHLTLPOALPOYAGSGLTLTA 300
Db      241 QAEERASSSKSWITFDLKNKEVSVKRVTDPKLOMGKKLPLHLTLPOALPOYAGSGLTLTA 300
Qy      301 LEAKTGKLEHVEVNLVVMRAATOLQKNLTCEVWGPTSKMLSLKLENKEAKVSKREKPVWV 360
Db      301 LEAKTGKLEHVEVNLVVMRAATOLQKNLTCEVWGPTSKMLSLKLENKEAKVSKREKPVWV 360
Qy      361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTP----- 393
Db      361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPEASTKGSVFPFLAPSSKSTSGG 420
Qy      394 ----- 393
Db      421 TAALGLVKDYFPEPVTWSNMGALTSGVHTFPAVLQSSGLYSLSVTVPPSSSLGTQTY 480
Qy      394 -----VERKSCDKHTTCPCRPAPRLGGSVLFPPPKKDTLMISRTPE 437
Db      481 ICNVNKHPSNTKVDKKVEPKSCDKHTTCPCRPAPRLGGSVLFPPPKKDTLMISRTPE 540
Qy      438 VTCVVVDVSHEDPEVKFNNYVVDGVEVHNAKTKRREQYSTYRVVSVLTVLHQDMLNGKE 497
Db      541 VTCVVVDVSHEDPEVKFNNYVVDGVEVHNAKTKRREQYSTYRVVSVLTVLHQDMLNGKE 600
Qy      498 YKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIA 557
Db      601 YKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIA 660
Qy      558 VEVESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDSRWQOGNVSCSVMEHALNHNHTQ 617
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Db      661 VEMESNGCPENNYKTPVLDSGSEFLYSKLTVDKSRMOQGNVFSCEVMHEALHNYTQ 720
QY      618 KSLSLSPG 625
Db      721 KSLSLSPG 728

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RESULT 9

AAVS1082
ID AAVS1082 standard; protein; 616 AA.

AC AAVS1082;

DT 23-MAR-2000 (first entry)

DE Human fusion protein CD4Bgamma1.

XX Fusion protein; human; CD4; IgG1; immunoglobulin; gp120;

KW anti-human immunodeficiency virus; CD4Bgamma1.

XX Homo sapiens.

OS Synthetic.

PN US6004781-A.

PD 21-DEC-1999.

PF 04-FEB-1994; 94US-00191708.

XX 22-JAN-1988; 88US-00147351.

PR 23-JAN-1989; 89US-00295596.

PR 09-JUN-1992; 92US-00896781.

PR 12-APR-1993; 93US-00057952.

XX (GEO) GEN HOSPITAL CORP.

XX Seed B;

XX WPI; 2000-085792/07.

DR N-PSDB; AAZ44065.

XX Fusion protein useful for the treatment of human immunodeficiency virus.

XX Example 1; Col 59-70; 39pp; English.

XX This invention describes a novel nucleic acid (I) encoding a fusion

CC protein comprising a DNA sequence encoding amino acids 1-173 of CD4 (II)

CC and a DNA sequence encoding a human immunoglobulin (Ig) heavy or light

CC chain (III). The products of the invention have anti-human

CC immunodeficiency virus (HIV) activity and are capable of binding to

CC gp120. The fusion protein is useful for treating human immunodeficiency

CC virus (HIV) or simian immunodeficiency virus (SIV). This sequence

CC represents the fusion protein CD4Bgamma1 which is constructed from CD4

CC linked to human IgG1 upstream of the hinge region

XX

XX

XX

Sequence 616 AA;

Query Match 92.8%; Score 3169; DB 3; Length 616;

Best Local Similarity 97.8%; Pred. No. 4,8e-165; Indels 10; Gaps 2;

Matches 611; Conservative 0; Mismatches 4;

DB 1 MNRGVFPHLLLVLTALPAATQGNKVLGKGGDTVELTCTASQKSIQFHWKNSNIK 60

QY 1 MNRGVFPHLLLVLTALPAATQGNKVLGKGGDTVELTCTASQKSIQFHWKNSNIK 60

DB 61 ILGNQGSFLTKGSPSLANDRADSRSLMDQGNFPLIIKUKIEDSDTYICEVEDQKEEYQL 120

QY 61 ILGNQGSFLTKGSPSLANDRADSRSLMDQGNFPLIIKUKIEDSDTYICEVEDQKEEYQL 120

DB 121 LVFGLTASDPHLLQGGSLTTLTSPSSPSVQCRSGKNIOGGKTLVSQLELDQSG 180

QY 121 LVFGLTASDPHLLQGGSLTTLTSPSSPSVQCRSGKNIOGGKTLVSQLELDQSG 180

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QY      181 TWICTVLQNGKVEFKIDIVLAFQKASSIVYKKEGQVEFSPPLATVTEKLTSGGELMW 240
Db      181 TWICTVLQNGKVEFKIDIVLAFQKASSIVYKKEGQVEFSPPLATVTEKLTSGGELMW 240
QY      241 QAERASSKSWITFDLKNKEVSRYKRYQDPKLGKGLPLHLTLPOLPOYAGSGLTLA 300
Db      241 QAERASSKSWITFDLKNKEVSRYKRYQDPKLGKGLPLHLTLPOLPOYAGSGLTLA 300
QY      301 LEAKTGKHOEVLVVMRATOLOGLTCBVGPTSPKMLSLKLENKAAYSKEKPVWV 360
Db      301 LEAKTGKHOEVLVVMRATOLOGLTCBVGPTSPKMLSLKLENKAAYSKEKPVWV 360
QY      361 LNPBAGMOCILSDSGVLLSNIKVLPTWSTPYEPRSCKTHPCPCAPABELLGPVSF 420
Db      361 LNPBAGMOCILSDSGVLLSNIKVLPTWSTPYEPRSCKTHPCPCAPABELLGPVSF 420
QY      421 LFPKPKDTLMISTPEVTCVVDVSHEDPEVKKNVYVDGEVYNATKTPREEDYNSTYR 480
Db      421 LFPKPKDTLMISTPEVTCVVDVSHEDPEVKKNVYVDGEVYNATKTPREEDYNSTYR 480
QY      481 VVSVLTVLHODMLNGKEKCKVSNKALPAPIEKTISKAKQPREPOYYTLPPSRDELTKN 540
Db      471 VVSVLTVLHODMLNGKEKCKVSNKALPAPIEKTISKAKQPREPOYYTLPPSRDELTKN 530
QY      541 QVSLTCLVKGFPSPDIWEMESNGCPENNYKTPPVLDSGSEFLYSKLTVDKSRMOQGN 600
Db      531 QVSLTCLVKGFPSPDIWEMESNGCPENNYKTPPVLDSGSEFLYSKLTVDKSRMOQGN 590
QY      601 VFSCSVNHEALHNNHYTQKSLSLSPG 625
Db      591 VFSCSVNHEALHNNHYTQKSLSLSPG 615

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RESULT 10

AAVS172
ID AAVS172 standard; protein; 616 AA.

AC AAVS172;

DT 14-MAR-2000 (first entry)

DE CD4-Ig fusion protein CD4Bgamma1.

XX HIV; extracellular; CD4; gp120; immunoglobulin; Ig; fusion protein;

KW secreted protein; SIV infection; medicament.

XX Homo sapiens.

OS Synthetic.

PN CA1340741-C.

PD 14-SEP-1999.

XX 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

XX (GEO) GEN HOSPITAL CORP.

XX Seed B;

XX WPI; 2000-063015/06.

DR N-PSDB; AAZ48205.

XX New fusion gene encoding immunoglobulin-CD4 fusion proteins, useful in

PT the treatment of HIV or simian immunodeficiency virus infections.

XX Example 1; Page 61-68; 89pp; English.

XX The invention provides a fusion gene encoding a fusion protein that

CC comprises an extracellular CD4 DNA sequence or its fragment which binds

CC to HIV gp120 when fused to an immunoglobulin (Ig) chain and the DNA

CC sequence of an Ig heavy or light chain, where the DNA sequence encoding
 CC the variable region has been replaced with the DNA sequence which encodes
 CC extracellular CD4 or its gp120 binding fragment. The fusion protein is
 CC capable of being secreted. The fusion proteins are useful for treating
 CC HIV or SIV infections in animals, preferably humans. They are also useful
 CC for producing medicaments which can be used for treating HIV or SIV
 CC infections in humans. The present sequence represents the fusion protein
 CC CD4Bammal where the CD4 is linked to human IgG1 at the BamI site
 CC downstream from the hinge region
 CC

SO Sequence 616 AA;

Query Match 92.8%; Score 3169; DB 3; Length 616;
 Best Local Similarity 97.8%; Pred. No. 4.8e-165;
 Matches 611; Conservative 0; Mismatches 4; Indels 10; Gaps 2;

QY 1 NMRGVFRRLLLVQLALLPAATQGNKVVLGKKGDVVELTCTASQKSIQFHWKNSNOIK 60
 DB 1 NMRGVFRRLLLVQLALLPAATQGNKVVLGKKGDVVELTCTASQKSIQFHWKNSNOIK 60
 QY 61 ILGNQSFLLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEYQL 120
 DB 61 ILGNQSFLLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEYQL 120
 QY 121 LVFGLTANSDDTHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSDDTHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYVKEGEQVEFSPFLAFVTEKLTSGGELMW 240
 DB 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYVKEGEQVEFSPFLAFVTEKLTSGGELMW 240
 QY 241 QAERASSSKSWITFDLKNKEVSKRYTOPDKLQMGKPLHLTLPLQALPOYAGSGLTLTA 300
 DB 241 QAERASSSKSWITFDLKNKEVSKRYTOPDKLQMGKPLHLTLPLQALPOYAGSGLTLTA 300
 QY 301 LEAKTGKLTQEVNVLVVRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYWV 360
 DB 301 LEAKTGKLTQEVNVLVVRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYWV 360
 QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEBKSCDKTHTCPCAPELLGGPSVF 420
 DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEBKSCDKTHTCPCAPELLGGPSVF 420
 QY 421 LPPPKKDTLMTSRTEVTCVVVDVSHEDPEVKFNNYVNDGVEVNAKTRPREEOYNSTR 480
 DB 421 LPPPKKDTLMTSRTEVTCVVVDVSHEDPEVKFNNYVNDGVEVNAKTRPREEOYNSTR 480
 QY 481 VVSVLTVLHODMLNGKEKCKVSNKALPAPIEKTISKAGOPREPOVYTLPPSRDELTKN 540
 DB 481 VVSVLTVLHODMLNGKEKCKVSNKALPAPIEKTISKAGOPREPOVYTLPPSRDELTKN 540
 QY 541 QVSLTCLVNGFYPSDIAVEMESNGOPENNYKTPPVLDSGSEFLYSKLTVDKSRMOQGN 600
 DB 541 QVSLTCLVNGFYPSDIAVEMESNGOPENNYKTPPVLDSGSEFLYSKLTVDKSRMOQGN 600
 QY 601 VFSGSVMEBALNHYTKSLSLSPG 625
 DB 601 VFSGSVMEBALNHYTKSLSLSPG 625
 QY 591 VFSGSVMEBALNHYTKSLSLSPG 615
 DB 591 VFSGSVMEBALNHYTKSLSLSPG 615

RESULT 11

ID AAP93012 standard; protein; 614 AA.

AC AAP93012;

XX 25-MAR-2003 (revised)

DT 03-AUG-1992 (first entry)

DE Genetic construct which encodes CD4 linked to human IgG1 at the BamI site
 XX downstream from the hinge region (fusion protein CD4Bammal).

KW Fusion protein; immunoglobulin-like molecule; HIV; SIV; therapy;
 KW diagnosis; CD4; gp120; binding fragment; glycoprotein; variable region.

OS Homo sapiens.

PN EP325262-A.

PD 26-JUL-1989.

PF 20-JAN-1989; 89EP-00100913.

PR 22-JAN-1988; 88US-00147351.

PA (GENO) GEN HOSPITAL CORP.

PI Seed B;

DR WPI; 1989-214472/30.

DR N-PSDB; AAN90360.

PT Immunoglobulin-CD4 fusion proteins - used for treating HIV or SIV
 PT infections or detecting HIV or SIV in sample.

PS Example; Table 5, Page 48-55; 68pp; English.

The fusion protein genes of the invention pref. comprises cDNA sequences
 CC which encode CD4 or a fragment which binds gp120 ligated to an expression
 CC plasmid which encodes an antibody in which the variable region of the
 CC gene has been deleted (see WO87-02671). The CD4 portion of the fusion
 CC protein may comprise the complete CD4 sequence, the 370 AA extracellular
 CC region and the membrane spanning domain, or the extracellular region. The
 CC Ig heavy chain is pref. from IGM, IgG1 or IgG3. The following are
 CC specifically claimed: fusion proteins CD4Bammal, CD4mmu, CD4pmu,
 CC CD4Bammal, and CD4mmu (No. 67608), CD4Bammal (No. 67609) and
 CC PCDEBammal (No. 67610). (Updated on 25-MAR-2003 to correct PA field.)
 XX

SO Sequence 614 AA;

Query Match 91.9%; Score 3138; DB 1; Length 614;
 Best Local Similarity 97.1%; Pred. No. 2.3e-163;
 Matches 607; Conservative 0; Mismatches 6; Indels 12; Gaps 3;

QY 1 NMRGVFRRLLLVQLALLPAATQGNKVVLGKKGDVVELTCTASQKSIQFHWKNSNOIK 60
 DB 1 NMRGVFRRLLLVQLALLPAATQGNKVVLGKKGDVVELTCTASQKSIQFHWKNSNOIK 60
 QY 61 ILGNQSFLLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEYQL 120
 DB 61 ILGNQSFLLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEYQL 120
 QY 121 LVFGLTANSDDTHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSDDTHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYVKEGEQVEFSPFLAFVTEKLTSGGELMW 240
 DB 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYVKEGEQVEFSPFLAFVTEKLTSGGELMW 240
 QY 241 QAERASSSKSWITFDLKNKEVSKRYTOPDKLQMGKPLHLTLPLQALPOYAGSGLTLTA 300
 DB 241 QAERASSSKSWITFDLKNKEVSKRYTOPDKLQMGKPLHLTLPLQALPOYAGSGLTLTA 300
 QY 301 LEAKTGKLTQEVNVLVVRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYWV 360
 DB 301 LEAKTGKLTQEVNVLVVRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYWV 360
 QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEBKSCDKTHTCPCAPELLGGPSVF 420
 DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEBKSCDKTHTCPCAPELLGGPSVF 420
 QY 421 LPPPKKDTLMTSRTEVTCVVVDVSHEDPEVKFNNYVNDGVEVNAKTRPREEOYNSTR 480
 DB 421 LPPPKKDTLMTSRTEVTCVVVDVSHEDPEVKFNNYVNDGVEVNAKTRPREEOYNSTR 480
 QY 411 LPPPKKDTLMTSRTEVTCVVVDVSHEDPEVKFNNYVNDGVEVNAKTRPREEOYNSTR 470
 DB 411 LPPPKKDTLMTSRTEVTCVVVDVSHEDPEVKFNNYVNDGVEVNAKTRPREEOYNSTR 470

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QY 481 VSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISKAKGPREFQVYTLPPSRDELTKN 540
DB 471 VVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISKAKGPREFQVYTLPPSRDELTKN 528
QY 541 QVSLTCLVKGFPSPDIIVEMESNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRMOQGN 600
DB 529 QVSLTCLVKGFPSPDIIVEMESNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRMOQGN 588
QY 601 VFSCSVMEALHNHYTQKSLSLSPG 625
DB 589 VFSCSVMEALHNHYTQKSLSLSPG 613

RESULT 12
AAB19511
ID AAB19511 standard; protein; 616 AA.
XX
AC AAB19511;
XX
DT 09-JAN-2001 (first entry)
XX
DE CD4-IgG1 fusion protein CH4Bgammal.
XX
KM CD4; IgG1; human; CD4Bgammal; fusion protein; immunoglobulin; HIV; SIV;
KM gp120; therapy; diagnosis.
XX
OS Homo sapiens.
XX
PH Key Location/Qualifiers
FT Protein 1..395
FT Protein /note="CD4 extracellular region"
FT Protein 400..616
FT Protein /note="IgG1 heavy chain"
XX
PN US6117656-A.
PD 12-SEP-2000.
XX
PF 07-JUN-1995; 95US-00479353.
XX
PR 22-JAN-1988; 88US-00147351.
PR 23-JAN-1989; 89US-00295956.
PR 09-JUN-1992; 92US-00896781.
PR 12-APR-1993; 93US-00057952.
PR 04-FEB-1994; 94US-00191708.
XX
PA (GCHO ) GEN HOSPITAL CORP.
XX
PI Seed B;
XX
DR MPI; 2000-586558/55.
DR N-PSDB; AAA50664.
XX
FT CD4-immunoglobulin fusion proteins, useful for targeting gp120 of HIV or
FT SIV.
XX
PS Example 1; Col 59-70; 39pp; English.
XX
CC The present sequence is that of fusion protein CD4Bgammal comprising the
CC extracellular portion of CD4, which binds to HIV gp120, linked at its C-
CC terminus to the human IgG1 heavy chain. To obtain the fusion protein, DNA
CC encoding CD4 was linked to IgG1 DNA at the BamI site downstream of the
CC hinge region (see AAA50664). Fusion protein CD4Bgammal and a nucleic acid
CC encoding it are claimed. Also claimed are a vector comprising the nucleic
CC acid, and a method of producing the fusion protein in secreted form using
CC a transformed host cell. The fusion protein may further comprise a
CC therapeutic agent, radiolabel or NMR imaging agent. The fusion protein
CC can be administered to an animal (including humans) for treatment of HIV
CC or SIV infection, and can also be used in assays for HIV or SIV, imaging
CC and tissue stains. IgG1 fusion proteins such as CD4Bgammal provide both
CC complement-mediated and cell-mediated immunity

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SQ Sequence 616 AA;
Query Match 90.1%; Score 3077; DB 3; Length 616;
Best Local Similarity 96.2%; Pred. No. 5e-160;
Matches 600; Conservative 0; Mismatches 14; Indels 10; Gaps 2;

QY 1 MNRGVPFRHLVLVQLALLPAATQGNKVYLGKGDYVELTCTASQKSIQPHMNSNQIK 60
DB 1 MNRGVPFRHLVLVQLALLPAATQGNKVYLGKGDYVELTCTASQKSIQPHMNSNQIK 60
QY 61 ILNGQSFLLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDBDTYICEVEDQKEEYOL 120
DB 61 ILNGQSFLLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDBDTYICEVEDQKEEYOL 120
QY 121 LVFGLTANSDTHLLQGGSLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDTHLLQGGSLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 121 LVFGLTANSDTHLLQGGSLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDTHLLQGGSLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 181 TWTCVTVLQNGKVEFKIDIVVLAFOKASSIVYKKEGQVEFSPPLAFTVEKLTGSGELMW 240
DB 181 TWTCVTVLQNGKVEFKIDIVVLAFOKASSIVYKKEGQVEFSPPLAFTVEKLTGSGELMW 240
QY 241 QABRASSKSWITFDLKNKEVSRYRQDPKLOMGKPLHLTLPOALPOYAGSGNLTLA 300
DB 241 QABRASSKSWITFDLKNKEVSRYRQDPKLOMGKPLHLTLPOALPOYAGSGNLTLA 300
QY 301 LEAKTGLHGEVNLVVRATQLOKNLTCBVGPTSPKLMLSLKLENKAKVSKREKPVWV 360
DB 301 LEAKTGLHGEVNLVVRATQLOKNLTCBVGPTSPKLMLSLKLENKAKVSKREKPVWV 360
QY 361 LNPEAGMWQCLSDSGVLLSESNIKVLPWSTPYEPKSCDKTRCPCPABELGSPSVF 420
DB 361 LNPEAGMWQCLSDSGVLLSESNIKVLPWSTPYEPKSCDKTRCPCPABELGSPSVF 420
QY 421 LFPKPKDQTLMSRTPVTCVVDVSHEDPEVKMNVVDGVEYNATKTPREQYNSYR 480
DB 421 LFPKPKDQTLMSRTPVTCVVDVSHEDPEVKMNVVDGVEYNATKTPREQYNSYR 480
QY 481 VSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISKAKGPREFQVYTLPPSRDELTKN 540
DB 471 VVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISKAKGPREFQVYTLPPSRDELTKN 528
QY 541 QVSLTCLVKGFPSPDIIVEMESNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRMOQGN 600
DB 529 QVSLTCLVKGFPSPDIIVEMESNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRMOQGN 588
QY 601 VFSCSVMEALHNHYTQKSLSLSPG 625
DB 589 VFSCSVMEALHNHYTQKSLSLSPG 613

RESULT 13
AAR26531
ID AAR26531 standard; protein; 534 AA.
XX
AC AAR26531;
XX
DT 25-MAR-2003 (revised)
DT 28-JAN-1993 (first entry)
XX
DE Sequence of CD4-IgG1 chimeric heavy chain heterotetramer.
XX
KM CD4-gamma 1 chimeric heavy chain homodimer; expression vector; HIV;
KM therapy; diagnostic agent; inhibition.
XX
OS Synthetic.
XX
PH Key Location/Qualifiers
FT Protein 205..302
FT Protein /label=CHI
FT Protein 303..317
FT Protein /label=hinge
FT Region 318..427

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FT      Region /label= CH2
FT      428..534
FT      /label= CH3
XX      MO9213559-A1.
XX      20-AUG-1992.
XX      10-FEB-1992; 92MO-US001152.
XX      08-FEB-1991; 91US-00654205.
XX      (PROG-) PROGENICS PHARM INC.
XX      Beaudry GA, Maddon PJ;
XX      MPI; 1992-299758/36.
XX      N-PSDB; AAQ27831.
XX      CD4-gamma 1 chimeric heavy chain homo-dimer and its expression vector -
XX      for preventing and treating HIV infection useful as a diagnostic agent.
XX      Example; Fig 4; 88pp; English.
XX      The human CD4 cDNA is excised from the plasmid pSP6T4 and cloned into
XX      M13mp18. In order to excise a fragment containing the CH1 exon of the
XX      human gamma 1 heavy chain gene, the plasmid pBR gamma 1 is digested with
XX      SacII, and the SacII sites are then made flush using T4 DNA polymerase.
XX      The fragment containing the CH1 exon is then purified and ligated to the
XX      M13mp18(Cd4) vector. Oligonucleotide-mediated site-directed mutagenesis
XX      is then performed to juxtapose the CD4 and CH1 sequences in frame. The
XX      CD4-CH1 chimeric gene is then linearized and ligated to the PstI-PstI DNA
XX      fragment of the plasmid pBR gamma 1 containing the hinge, CH2, and CH3
XX      exons of the human gamma 1 chain gene designated CD4-IgG1HC-pacCMV (ATCC
XX      75192). (Updated on 25-MAR-2003 to correct PN field.)
XX      Sequence 534 AA;

Query Match      66.4%; Score 2268; DB 2; Length 534;
Best Local Similarity 73.9%; Pred. No. 6.3e-116;
Matches 465; Conservative 16; Mismatches 48; Indels 100; Gaps 10;

QY      1 MNRGVPRFRLILVQLALPAATQGNKVVLGKKGDVETLTASQKKSIOFMKNSNOIK 60
DB      1 MNRGVPRFRLILVQLALPAATQGNKVVLGKKGDVETLTASQKKSIOFMKNSNOIK 60
QY      61 ILGNQGSFLTKGSPSKINDRADSRRSIMDQGNFPLIINKIKIEDSDTYICEVEDQKEEYVL 120
DB      61 ILGNQGSFLTKGSPSKINDRADSRRSIMDQGNFPLIINKIKIEDSDTYICEVEDQKEEYVL 120
QY      121 LVFGLTANSDBTHLQOSLTLTLESPRSGSPSVQCSPRGKNTIOGKTLISVQLSDSG 180
DB      121 LVFGLTANSDBTHLQOSLTLTLESPRSGSPSVQCSPRGKNTIOGKTLISVQLSDSG 180
QY      181 TWTCTVLQOKKVEFKIDIVLAFOKASSIVYKKEGEQVEFSFPLAFVTEKLTSGSGELMW 240
DB      181 TWTCTVLQOKKVEFKIDIVLAFAST-----KQPSV---FPL----- 215
QY      241 QAEPRASSSKWITFDLKNKESVKRVTQPKLQMGKGLPLHLTLPLQALPQYAG---SGNTL 297
DB      241 -----APSSKSKS-----TSGTAALGCLVVDYPEPPTVSWNSGALTSGVH 255
QY      298 TLALAKKQCKLHQBENVLVYMRATQI-QKRLTCEWAGFISPKMLSLKENKAKYSKREK 356
DB      298 TLALAKKQCKLHQBENVLVYMRATQI-QKRLTCEWAGFISPKMLSLKENKAKYSKREK 356
QY      357 PWMVLNPEAGMWQCLLSDSGVLLSNNIKVLPWTSPVEPKSCDHTTCCPPAPABELLGG 416
DB      357 PWMVLNPEAGMWQCLLSDSGVLLSNNIKVLPWTSPVEPKSCDHTTCCPPAPABELLGG 416
QY      293 P-----SNTKTV-----DKKVEPKSCDHTTCCPPAPABELLGG 324
DB      293 P-----SNTKTV-----DKKVEPKSCDHTTCCPPAPABELLGG 324
QY      417 PSVFLFPPPKDQTLMISSRTPEVTCVVVDVSHEDPEVKFMYVDGVEVHNAKTKPREEOYN 476
DB      417 PSVFLFPPPKDQTLMISSRTPEVTCVVVDVSHEDPEVKFMYVDGVEVHNAKTKPREEOYN 476
DB      325 PSVFLFPPPKDQTLMISSRTPEVTCVVVDVSHEDPEVKFMYVDGVEVHNAKTKPREEOYN 384

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QY      477 STYRVSVTLVTHODMLNCKEYKCKVSNKALPAPIEKTISAKGQPREPOVYTLPPSRDE 536
DB      385 STYRVSVTLVTHODMLNCKEYKCKVSNKALPAPIEKTISAKGQPREPOVYTLPPSRDE 444
QY      537 LTKNOVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRW 596
DB      445 LTKNOVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRW 504
QY      597 QOQNVFSCSVWHEALHNHYTQKSLSLSPG 625
DB      505 QOQNVFSCSVWHEALHNHYTQKSLSLSPG 533

RESULT 14
ID      AAR26530
XX      AAR26530 standard; protein; 435 AA.
XX      AAR26530;
AC      AAR26530;
XX      25-MAR-2003 (revised)
DT      28-JAN-1993 (first entry)
XX      Sequence of one chain of a CD4-gamma 1 chimeric heavy chain homodimer.
XX      CD4-gamma 1 chimeric heavy chain homodimer; expression vector; HIV;
XX      therapy; diagnostic agent; inhibition.
XX      Synthetic.
XX      Key      Location/Qualifiers
FH      Region      1..204
FT      /label= CD4
FT      /note= "1..25 = preregion"
FT      Region      205..219
FT      /label= hinge
FT      Region      220..329
FT      /label= CH2
FT      Region      330..436
FT      /label= CH3
FT      Region      437..534
PN      MO9213559-A1.
XX      20-AUG-1992.
XX      10-FEB-1992; 92MO-US001152.
XX      08-FEB-1991; 91US-00654205.
XX      (PROG-) PROGENICS PHARM INC.
XX      Beaudry GA, Maddon PJ;
XX      MPI; 1992-299758/36.
XX      N-PSDB; AAQ27830.
XX      CD4-gamma 1 chimeric heavy chain homo-dimer and its expression vector -
XX      for preventing and treating HIV infection useful as a diagnostic agent.
XX      Example; Fig 3; 88pp; English.
XX      Human CD4 cDNA was excised from pSP6T4 and cloned into M13mp18. The 2 kb
XX      PstI/PstI fragment from pBR lambda 1 contg. the human lambda 1 heavy
XX      chain gene (contg. the hinge, CH2 and CH3 exons) was isolated and cloned
XX      into the BAP-treated M13mp18/CD4 vector. To obtain a CD4-lambda 1
XX      chimeric heavy chain gene, oligonucleotide-mediated site-directed
XX      mutagenesis was performed to juxtapose the CD4 and lambda 1 heavy chain
XX      DNA sequences, ligating the CD4 sequence in frame to the hinge exon. The
XX      DNA was then cloned into pCDNA-1 to produce CD4-IgG1-pcDNA1 (ATCC 40951).
XX      (Updated on 25-MAR-2003 to correct PN field.)
XX      Sequence 435 AA;

```


Db 407 VFSCSVMEALHNHYTKSLSLSGAKPTHVNVSVMAEVDGTC 449

RESULT 16

AA026783 standard; protein; 530 AA.

AC AAR26783;

XX

XX 24-OCT-2003 (revised)

DT 25-MAR-2003 (revised)

DT 06-FEB-1993 (first entry)

XX

DE CD4-IgG2 chimeric heavy chain.

XX

KM homodimer; soluble CD4; T cell receptor; CD4 antigen; high recovery;

KM chimeric; increased serum half life; HIV infection; AIDS; ss.

XX

OS Homo sapiens.

OS Chimeric.

XX

XX Key Location/Qualifiers

FT Domain 1..205

FT Domain /label= CD4 domain

FT Domain 206..302

FT Domain /label= CH1 domain

FT Domain 303..312

FT Domain /label= hinge domain

FT Domain 313..423

FT Domain /label= CH2 domain

FT Domain 424..530

FT Domain /label= CH3 domain

XX

PN MO9213947-A1.

XX

PD 20-AUG-1992.

XX

PF 10-FEB-1992; 92MO-US001143.

XX

PR 08-FEB-1991; 91US-00653684.

XX

PA (PROG-) PROGENICS PHARM INC.

PI Beaudry GA, Madden PJ;

XX

DR WPI; 1992-300034/36.

DR N-PSDB; AAQ28089.

XX

PT CD4-gamma-2 and CD4-IgG2 chimera(s) and expression vectors - for

PT treatment, prevention and diagnosis of HIV infection.

XX

PS Claim 15; Fig 4; 90pp; English.

XX

XX This sequence represents a CD4-IgG2 chimeric heavy chain heterodimer

CC it was produced by expression of the coding mutagenised cDNA (produced as

CC described in AAQ28089) in Dftr-CHO cells. The protein is efficiently

CC assembled intracellularly and effectively secreted from mammalian cells

CC pret. CHO, COS, or myeloma cells as a heterodimer, enabling high

CC recovery and purification from the medium of cells expressing it. It

CC possesses increased serum half-life and has increased avidity for HIV cf.

CC heavy chain dimer. It can inhibit HIV infection of CD4+ cells and block

CC the spread of HIV infection within a patient. Attachment to a detectable

CC marker makes it useful in an assay for HIV or SIV infection, and it can

CC also be linked to toxins, eg Diphtheria, Pseudomonas exotoxin A (domains

CC I or II) or the deglycosylated A-chain of ricin. (Updated on 25-MAR-2003

CC to correct PN field.) (Updated on 24-OCT-2003 to standardise OS field)

XX

SO Sequence 530 AA:

Query Match 63.0%; Score 2151; DB 2; Length 530;

Best Local Similarity 70.4%; Pred. No. 1.5e-109;

Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

QY 1 MNRGVPFRHLLVQLALLPAATQGNKRVLGKQDVTVELTCTASQKSIQFMKNSNQIK 60

Db 1 MNRGVPFRHLLVQLALLPAATQGNKRVLGKQDVTVELTCTASQKSIQFMKNSNQIK 60

QY 61 ILGNQSFUTKGPSTKLNDRADSRRLMDQGNFPLIIRKULKTEDSTTYICEVEDQKEEVL 120

Db 61 ILGNQSFUTKGPSTKLNDRADSRRLMDQGNFPLIIRKULKTEDSTTYICEVEDQKEEVL 120

QY 121 LVFGLTANSDPHTLQGGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180

Db 121 LVFGLTANSDPHTLQGGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180

QY 181 TWTCTVLQNKQKVEPKIDIVLAFQKASSIYKKEGQVEFSPLAFTVEKLTGSGELMW 240

Db 181 TWTCTVLQNKQKVEPKIDIVLAFQKASSIYKKEGQVEFSPLAFTVEKLTGSGELMW 240

QY 241 QAERASSSKSWITFDLKNKEVSVKRVYODPKLQNGKKLPLHLTLPQALPYAG--SGNL 297

Db 241 QAERASSSKSWITFDLKNKEVSVKRVYODPKLQNGKKLPLHLTLPQALPYAG--SGNL 297

QY 217 -----PCSRSTSESTPALGLCLVKDYFPPEVTVSMNSGALTSGVH 255

Db 217 -----PCSRSTSESTPALGLCLVKDYFPPEVTVSMNSGALTSGVH 255

QY 298 TLALAKTKGLHQEVNLVWGRATOL-QKNLCEVWGPTSPKMLSLKLENKAKVSKREK 356

Db 298 TLALAKTKGLHQEVNLVWGRATOL-QKNLCEVWGPTSPKMLSLKLENKAKVSKREK 356

QY 256 TFPVAVLQSSGLYSLSVTVVDSNFGTGTTCNV-----DHK 292

Db 256 TFPVAVLQSSGLYSLSVTVVDSNFGTGTTCNV-----DHK 292

QY 357 PVMVLNPEAGMWQCLLSDSGVILESNIKVLPTWSTPYEPKSCDKTHTCPCPAPALLGG 416

Db 357 PVMVLNPEAGMWQCLLSDSGVILESNIKVLPTWSTPYEPKSCDKTHTCPCPAPALLGG 416

QY 293 P-----SNKKVDKT-----VERKCCVE---CPCPAPP-VAG 320

Db 293 P-----SNKKVDKT-----VERKCCVE---CPCPAPP-VAG 320

QY 417 PSVFLPFPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYDGYEVANAKTKPREBYN 476

Db 417 PSVFLPFPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYDGYEVANAKTKPREBYN 476

QY 321 PSVFLPFPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYDGYEVANAKTKPREBYN 380

Db 321 PSVFLPFPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYDGYEVANAKTKPREBYN 380

QY 477 STYRYVSVLTVLHOMLNGKEKCKVSNKALPAPLEKTIISAKGQPREPOVYTLPPSRDE 536

Db 477 STYRYVSVLTVLHOMLNGKEKCKVSNKALPAPLEKTIISAKGQPREPOVYTLPPSRDE 536

QY 381 STEFVSVLTVLHOMLNGKEKCKVSNKALPAPLEKTIISAKGQPREPOVYTLPPSRDE 440

Db 381 STEFVSVLTVLHOMLNGKEKCKVSNKALPAPLEKTIISAKGQPREPOVYTLPPSRDE 440

QY 537 LTKNOVSLTCLVKGFPSPDIAYEWESNGQPENNYKTPPVLDSDSFPLYSKLTVDKSRW 596

Db 537 LTKNOVSLTCLVKGFPSPDIAYEWESNGQPENNYKTPPVLDSDSFPLYSKLTVDKSRW 596

QY 441 MTKNOVSLTCLVKGFPSPDIAYEWESNGQPENNYKTPPVLDSDSFPLYSKLTVDKSRW 500

Db 441 MTKNOVSLTCLVKGFPSPDIAYEWESNGQPENNYKTPPVLDSDSFPLYSKLTVDKSRW 500

QY 597 QQGNVFSCSVMEALHNHYTKSLSLSPG 625

Db 501 QQGNVFSCSVMEALHNHYTKSLSLSPG 529

RESULT 17

AA085080

ID AA085080 standard; protein; 530 AA.

XX

AC AA085080;

XX

DT 19-JUN-2000 (first entry)

XX

XX CD4-IgG2 chimeric heterodimer heavy chain amino acid sequence.

XX

DE CD4-IgG2 chimeric heterodimer heavy chain amino acid sequence.

XX

XX CD4-IgG2 chimeric heavy chain heterodimer; immunconjugate; treatment;

KM cytotoxic radionuclide; cell surface glycoprotein; prevent; infection;

KM cellular immune response interaction mediator; HIV interaction; staging;

KM prognosis; envelope glycoprotein burden; human.

XX

OS Homo sapiens.

PN US6034223-A.

XX

PD 07-MAR-2000.

XX

PF 07-JUN-1995; 95US-00477460.

XX

PR 07-AUG-1992; 92US-00927931.

PR 06-AUG-1993; 93MO-US007422.

PR 03-FEB-1995; 95US-00379516.

XX

PA (PROG-) PROGENICS PHARM INC.

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XX Allaway GP, Maddon PJ;
XX
XX MPI: 2000-269502/23.
XX
XX N-PSDB: AA298856.
XX
XX New immunodeficiency, used to treat, prevent or image human immune
XX deficiency virus infection, comprises radionuclide attached to
XX heterotrimer of CD4-immunoglobulin chimeras.
XX
XX PS Disclosure: Fig 4; 58pp; English.
XX
XX This sequence represents the CD4-IgG2 chimeric heavy chain amino acid
XX sequence from the CD4-IgG2 chimeric heterotrimer. The invention relates
XX to an immunodeficiency comprising a cytotoxic radionuclide and a
XX heterotrimer of two heavy chains and two light chains. The cytotoxic
XX radionuclide is linked to either the heavy chains or the light chains, or
XX to all four chains, directly or through a bifunctional chelator. Both
XX heavy chains are chimeric CD4-Ig (immunoglobulin) G2 chains encoded by
XX vector CD4-IgG2HC-PRCCMV (ATCC 75193) and both light chains are chimeric
XX CD4-kappa chains encoded by vector CD4-KLC-PRCCMV (ATCC 75194). CD4 is a
XX non-polymorphic cell surface glycoprotein that is expressed on the
XX surface of helper T lymphocytes, cells of the monocyte/macrophage lineage
XX and dendritic cells. CD4 associates with major histocompatibility complex
XX (MHC) class II molecules on the surface of antigen presenting cells to
XX mediate efficient cellular immune response interactions. In humans CD4 is
XX the target of interaction with the human immunodeficiency virus HIV. The
XX immunodeficiency is used to kill cells infected with HIV, and for treating
XX or preventing infection. It is also used for imaging HIV-infected tissues
XX (for staging or prognosis of infection), and for assessing efficacy of
XX treatments. The immunodeficiency is also used to determine the HIV
XX envelope glycoprotein burden, once determined, this information is used
XX in the staging and prognosis of HIV infected patients. The
XX immunodeficiency should be active against all strains of HIV (since the
XX CD4-gp120 interaction is essential for infection). The heterotrimers
XX are assembled intracellularly and secreted efficiently from mammalian
XX cells, allowing high recovery and purification from the culture medium.
XX They have longer half-life in serum and greater avidity than heavy chain
XX dimers
XX
XX Sequence 530 AA;
XX
XX Query Match 63.0%; Score 2151; DB 3; Length 530;
XX Best Local Similarity 70.4%; Pred. No. 1.5e-109;
XX Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;
QY 1 MNRGVPRHLLVLTALPAATQGNKTVLGKGGDTVELCTASQKSIQFHMKNNSQIK 60
DB 1 MNRGVPRHLLVLTALPAATQGNKTVLGKGGDTVELCTASQKSIQFHMKNNSQIK 60
QY 61 ILGNQGSFLTKGPSKLANDRSDRSRLMPOGNFPLIKKLTEDSDTYICEVEDQKEEYQL 120
DB 61 ILGNQGSFLTKGPSKLANDRSDRSRLMPOGNFPLIKKLTEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGILTANSDTHLLQGSGILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGILTANSDTHLLQGSGILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TMTCTVLONOKKVERKIDIVLAFOKASSIYKKEGEQEVESFPLAFVEKLTSGSELIMW 240
DB 181 TMTCTVLONOKKVERKIDIVLAFOKASSIYKKEGEQEVESFPLAFVEKLTSGSELIMW 240
QY 191 TWTCTVLONOKKVERKIDIVLAFOKASSIYKKEGEQEVESFPLAFVEKLTSGSELIMW 216
DB 191 TWTCTVLONOKKVERKIDIVLAFOKASSIYKKEGEQEVESFPLAFVEKLTSGSELIMW 216
QY 241 OABERASSKSMITPDLKKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAG---SANTL 297
DB 241 OABERASSKSMITPDLKKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAG---SANTL 297
QY 217 -----PCSRSTSESTRALGCLVKDIPPEPVYVSNMNSGALTSGVH 255
DB 217 -----PCSRSTSESTRALGCLVKDIPPEPVYVSNMNSGALTSGVH 255
QY 298 TLAEAKTKLHQEVNLVVMRATQI--QKNTLCEVNGPTSPKLMSLKLENKAVKSKREK 356
DB 298 TLAEAKTKLHQEVNLVVMRATQI--QKNTLCEVNGPTSPKLMSLKLENKAVKSKREK 356
QY 266 TFPVAVLGSSGLYSLSSVTVPSNFGTQTYTCNV-----DHK 292
DB 266 TFPVAVLGSSGLYSLSSVTVPSNFGTQTYTCNV-----DHK 292
QY 357 PWTVLNPAAGMKQCLLSQGVLESNTKVLPTWSTPVEPKSCDKTHTCPCPAPELLGG 416
DB 357 PWTVLNPAAGMKQCLLSQGVLESNTKVLPTWSTPVEPKSCDKTHTCPCPAPELLGG 416
QY 293 P-----SNPKVDKT-----VERKQVE---CPGPCAPP-VAG 320
DB 293 P-----SNPKVDKT-----VERKQVE---CPGPCAPP-VAG 320

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QY 417 PSVFLPPPKKPDITLMISTREPTCVVVDVSHDEDEVKFNNYVVDGEVHNATKREPEQYN 476
DB 321 PSVFLPPPKKPDITLMISTREPTCVVVDVSHDEDEVKFNNYVVDGEVHNATKREPEQYN 476
QY 477 STYRVSVLTVLHODMINKGKRYCKVSNKALPAIEKTIKAKQCPREPOVYTLPPSRDE 536
DB 381 STYRVSVLTVLHODMINKGKRYCKVSNKALPAIEKTIKAKQCPREPOVYTLPPSRDE 536
QY 537 LTKQVSLTCLVKGFPSPDIAVEMESNGOPENNYKTPVLDSGSPFLYSKLTVDKSRW 596
DB 441 MTKQVSLTCLVKGFPSPDIAVEMESNGOPENNYKTPVLDSGSPFLYSKLTVDKSRW 500
QY 597 QQGNVFCSVNHEALHNHYTOKSLSPG 625
DB 501 QQGNVFCSVNHEALHNHYTOKSLSPG 529
XX
XX RESULT 18
XX ID AAB67323 standard; protein; 530 AA.
XX AC AAB67323;
XX XX
XX DT 23-APR-2001 (first entry)
XX XX
XX DE CD4-IgG2 chimeric heavy chain protein.
XX XX
XX KM Immunodeficiency, chelator; chimeric; HIV; human immunodeficiency virus.
XX XX
XX OS Homo sapiens.
XX XX
XX PN US6177549-B1.
XX XX
XX PD 23-JAN-2001.
XX XX
XX PF 10-JUN-1999; 99US-00329916.
XX XX
XX PR 07-AUG-1992; 92US-00927931.
XX PR 06-AUG-1993; 93WO-US007422.
XX PR 03-FEB-1995; 95US-00379516.
XX PR 07-JUN-1995; 95US-00477460.
XX XX
XX PA (PROG-) PROGENICS PHARM INC.
XX XX
XX PI Maddon PJ, Allaway GP.
XX XX
XX WP1, 2001-158582/16.
XX XX
XX PT Immunodeficiency for treating human immunodeficiency virus-infected
XX PT subject, consists of cytotoxic radionuclide linked to heterotrimer
XX PT comprising two chimeric CD4-IgG2 heavy chains and two chimeric CD4-
XX PT kappa light chains.
XX XX
XX PS Disclosure: Fig 4; 43pp; English.
XX PS
XX XX The present invention relates to an immunodeficiency, comprising a
XX CC cytotoxic radionuclide linked, directly or via a bifunctional chelator,
XX CC to a heterotrimer having two chimeric CD4-IgG2 heavy chains encoded by
XX CC an expression vector CD4-IgG2HC-PRCCMV and two chimeric CD4-kappa light
XX CC chains encoded by an expression vector CD4-KLC-PRCCMV. The invention is
XX CC useful for killing human immunodeficiency virus (HIV)-infected cells, for
XX CC the treatment and prevention of infection with HIV
XX XX
XX SQ Sequence 530 AA;
XX
XX Query Match 63.0%; Score 2151; DB 4; Length 530;
XX Best Local Similarity 70.4%; Pred. No. 1.5e-109;
XX Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;
QY 1 MNRGVPRHLLVLTALPAATQGNKTVLGKGGDTVELCTASQKSIQFHMKNNSQIK 60
DB 1 MNRGVPRHLLVLTALPAATQGNKTVLGKGGDTVELCTASQKSIQFHMKNNSQIK 60

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```
QY 61 ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIKIKIEDSDTYICEVEDOKEEYOL 120
PT |||||
PT ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIKIKIEDSDTYICEVEDOKEEYOL 120
Db 61 ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIKIKIEDSDTYICEVEDOKEEYOL 120

QY 121 LVFGLTANSDTHLLQOGSLTTLTLESPGSSPSVOCSPRGKNIQGGKTLVSQLELDQSG 180
|||
Db 121 LVFGLTANSDTHLLQOGSLTTLTLESPGSSPSVOCSPRGKNIQGGKTLVSQLELDQSG 180

QY 181 TWTCTVLQONOKKVEFKIDIVLAFQKASSIVYKKEGEQVEFSPPLAFYVEKLTGSGELMW 240
|||
Db 181 TWTCTVLQONOKKVEFKIDIVLAFQKASSIVYKKEGEQVEFSPPLAFYVEKLTGSGELMW 240

QY 241 QAEARASSSKSWITFDLKNKEVSVKRYTOPPKLQMGKKLPLHLTLPOALPOYAG---SGNL 297
|||
Db 241 QAEARASSSKSWITFDLKNKEVSVKRYTOPPKLQMGKKLPLHLTLPOALPOYAG---SGNL 297

QY 298 TLALAKTGKTLHOEYNLVVMRATOL-QKNLTCEVWGPTSPKMLSLKLENKAKVSKREK 356
|||
Db 298 TLALAKTGKTLHOEYNLVVMRATOL-QKNLTCEVWGPTSPKMLSLKLENKAKVSKREK 356

QY 357 PAVVNLPEAGMOCCLSDSGQVLESNIKVLPTWSTPVEPKSCDKTHTCPCPAPPELLQSG 416
|||
Db 357 PAVVNLPEAGMOCCLSDSGQVLESNIKVLPTWSTPVEPKSCDKTHTCPCPAPPELLQSG 416

QY 417 PSVFLPPPKKDTLMISRTPEVTCVVDVSHEDPEYKFMVYDGVENVNAKTKPREBOYN 476
|||
Db 417 PSVFLPPPKKDTLMISRTPEVTCVVDVSHEDPEYKFMVYDGVENVNAKTKPREBOYN 476

QY 477 STYRVSVLTVLHODMLNGEKYKCVSNKALPAPIEKTSKAKGQPREPOVYTLPPSRDE 536
|||
Db 477 STYRVSVLTVLHODMLNGEKYKCVSNKALPAPIEKTSKAKGQPREPOVYTLPPSRDE 536

QY 537 LTKQVSLTCLVKGFPSPDIWVESNQGPENNYKTPPVLDSDGSFELYSKLTVDKSRW 596
|||
Db 537 LTKQVSLTCLVKGFPSPDIWVESNQGPENNYKTPPVLDSDGSFELYSKLTVDKSRW 596

QY 597 OQGNVFCSCVMHEALHNHYTOKSLSLSPG 625
|||
Db 597 OQGNVFCSCVMHEALHNHYTOKSLSLSPG 625

RESULT 19
AAB80884
ID AAB80884 standard; protein; 530 AA.
AC AAB80884;
DT 29-MAY-2001 (first entry)
DE Human CD4-IgG2 chimeric heavy chain.
KW Human; Anti-HIV; CD4-IgG2 chimeric heterotetramer;
KW Immunoglobulin gamma 2.
OS Homo sapiens.
XX
XX US6187748-B1.
XX
XX 13-FEB-2001.
XX
XX 07-JUN-1995; 95US-00485372.
XX
XX 08-FEB-1991; 91US-00653684.
XX
XX 10-FEB-1992; 92WO-US001143.
XX
XX 08-DEC-1992; 92US-00960440.
XX
XX (PROG-) PROGENICS PHARM INC.
XX
XX Maddon PJ, Beaudry GA;
XX
XX WPI; 2001-264961/27.
XX
XX N-PSDB; AAF77830.
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XX Inhibiting human immunodeficiency virus (HIV) infection of a CD4+ cell,
PT or treating a subject having CD4+ cells infected with HIV involves using
PT CD4-IgG2 chimeric heterotetramer to form a complex with the HIV.
XX
XX Disclosure; Fig 4; 55pp; English.
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XX The present invention relates to a method for inhibiting infection of a
CC CD4+ cell by HIV. The method comprises contacting the HIV with a CD4-IgG2
CC chimeric heterotetramer to form a complex with the HIV (CD4 = cluster of
CC differentiation 4; IgG2 = immunoglobulin gamma 2). CD4 is a cell surface
CC glycoprotein that is expressed primarily on the surface of T cells. In
CC man, CD4 is the target of interaction with HIV. The heterotetramer has
CC two heavy and two light chains which are encoded by expression vectors
CC CD4-IgG2HC-pRCMV (V1) and CD4-kC-pRCMV (V2), respectively. The method
CC is used to inhibit infection of a CD4+ cell by a HIV and to prevent CD4+
CC cells of a subject from becoming infected with HIV. The method is also
CC useful for treating a subject having CD4+ cells infected with HIV. The
CC present sequence is human fusion protein: CD4-Ig2 chimeric heavy chain of
CC the CD4-IgG2 chimeric heterotetramer. This sequence was used in the
CC method of the present invention
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Sequence 530 AA;

Query Match 63.0%; Score 2151; DB 4; Length 530;

Best Local Similarity 70.4%; Pred. No. 1,5e-109; Mismatches 56; Indels 104; Gaps 11;

Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

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QY 1 MNRGVPFRHLLLVQLALLPAATQGNKVLGKGGDTVELTJASQKSIQFMKXNSNOIK 60
Db 1 MNRGVPFRHLLLVQLALLPAATQGNKVLGKGGDTVELTJASQKSIQFMKXNSNOIK 60

QY 61 ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIKIKIEDSDTYICEVEDOKEEYOL 120
|||
Db 61 ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIKIKIEDSDTYICEVEDOKEEYOL 120

QY 121 LVFGLTANSDTHLLQOGSLTTLTLESPGSSPSVOCSPRGKNIQGGKTLVSQLELDQSG 180
|||
Db 121 LVFGLTANSDTHLLQOGSLTTLTLESPGSSPSVOCSPRGKNIQGGKTLVSQLELDQSG 180

QY 181 TWTCTVLQONOKKVEFKIDIVLAFQKASSIVYKKEGEQVEFSPPLAFYVEKLTGSGELMW 240
|||
Db 181 TWTCTVLQONOKKVEFKIDIVLAFQKASSIVYKKEGEQVEFSPPLAFYVEKLTGSGELMW 240

QY 241 QAEARASSSKSWITFDLKNKEVSVKRYTOPPKLQMGKKLPLHLTLPOALPOYAG---SGNL 297
|||
Db 241 QAEARASSSKSWITFDLKNKEVSVKRYTOPPKLQMGKKLPLHLTLPOALPOYAG---SGNL 297

QY 298 TLALAKTGKTLHOEYNLVVMRATOL-QKNLTCEVWGPTSPKMLSLKLENKAKVSKREK 356
|||
Db 298 TLALAKTGKTLHOEYNLVVMRATOL-QKNLTCEVWGPTSPKMLSLKLENKAKVSKREK 356

QY 357 PAVVNLPEAGMOCCLSDSGQVLESNIKVLPTWSTPVEPKSCDKTHTCPCPAPPELLQSG 416
|||
Db 357 PAVVNLPEAGMOCCLSDSGQVLESNIKVLPTWSTPVEPKSCDKTHTCPCPAPPELLQSG 416

QY 417 PSVFLPPPKKDTLMISRTPEVTCVVDVSHEDPEYKFMVYDGVENVNAKTKPREBOYN 476
|||
Db 417 PSVFLPPPKKDTLMISRTPEVTCVVDVSHEDPEYKFMVYDGVENVNAKTKPREBOYN 476

QY 477 STYRVSVLTVLHODMLNGEKYKCVSNKALPAPIEKTSKAKGQPREPOVYTLPPSRDE 536
|||
Db 477 STYRVSVLTVLHODMLNGEKYKCVSNKALPAPIEKTSKAKGQPREPOVYTLPPSRDE 536

QY 537 LTKQVSLTCLVKGFPSPDIWVESNQGPENNYKTPPVLDSDGSFELYSKLTVDKSRW 596
|||
Db 537 LTKQVSLTCLVKGFPSPDIWVESNQGPENNYKTPPVLDSDGSFELYSKLTVDKSRW 596

QY 597 OQGNVFCSCVMHEALHNHYTOKSLSLSPG 625
|||
Db 597 OQGNVFCSCVMHEALHNHYTOKSLSLSPG 625
```

```

RESULT 20
ABG71123
ID   ABG71123 standard; protein; 530 AA.
XX
XX   ABG71123;
AC
XX
XX   17-JAN-2003 (first entry)
DT
XX
XX   CD4-immunoglobulin G2 (IgG2) chimeric heterotetramer.
DE
XX
XX   CD4-immunoglobulin G2; Ig gamma2; human immunodeficiency virus-1; HIV-1;
KM   mutant; muclein.
OS
OS   Homo sapiens.
OS   Synthetic.
XX
XX   Key      Location/Qualifiers
FH   Peptide  1..25
FT           /label= Signal_peptide
FT   Protein 26..530
FT           /note= "Mature CD4-IgG2 chimeric heterotetramer"
XX
XX   US6451313-B1.
XX
XX   17-SEP-2002.
XX
XX   07-JUN-1995; 95US-00484681.
XX
XX   08-FEB-1991; 91US-00653684.
PR   10-FEB-1992; 92WO-US001143.
PR   08-DEC-1992; 92US-00960440.
XX
XX   (PROG-) PROGENICS PHARM INC.
XX
XX   Maddon PJ, Beaudry GA;
XX
XX   WPI; 2003-038273/03.
DR   N-PSDB; A855721.
XX
XX   Novel CD4-immunoglobulin G2 chimeric heterotetramer neutralizes human
PT   immunodeficiency virus-1 with two heavy and light chains encoded by
PT   expression vectors designated CD4-IgG2HC-PRCCMV and CD4-KLC-PRCCMV,
PT   respectively.
XX
XX   Claim 1; Fig 4A-H; 54pp; English.
XX
XX   The invention describes a purified CD4-immunoglobulin (Ig)G2 chimeric
CC   heterotetramer (I) that neutralises human immunodeficiency virus-1 (HIV-
CC   1) having two heavy chains encoded by an expression vector designated CD4-
CC   -IgG2HC-PRCCMV, and two light chains encoded by expression vector
CC   designated CD4-KLC-PRCCMV. (I) and a composition (II) comprising (I) or
CC   (I) linked to a toxin, are useful for inhibiting HIV infection of a CD4
CC   cell, and preventing a subject being infected with HIV by blocking the
CC   spread of HIV infection. This is the amino acid sequence of the CD4-
CC   immunoglobulin G2 chimeric heavy chain chimeric heterotetramer useful in
CC   inhibiting HIV infection
XX
XX   Sequence 530 AA;
SQ
Query Match      63.0%; Score 2151; DB 6; Length 530;
Best Local Similarity 70.4%; Pred. No. 1.5e-109;
Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

```

```

Db
121 LVFGLTANSPTHLLOGGSLLTLTLESPGSSPSVQCRSPRKNIOGKTLVSQLELQDSG 180
Qy 181 TWICTVLQNKQVFEFKIDIVLAFOKASIVYKKEGQVFPPLAFTVEKLTSGGELMW 240
Db 181 TWICTVLQNKQVFEFKIDIVLAFAST-----KQSV---PPLA----- 216
Qy 241 QAERASSKSMITFDLKNKEVSRYVTDPKLOMGKYLPHLTLPLQALPOYAG--SGNL 297
Db 217 -----PCSRSTSESTALGCLVKDYFPEPYTVSMNSGALTSQVH 255
Qy 298 TLAEATKGLHQEVNLVVMKATQL-QKNTLCEVWGTSRKMLSLLENKAEVSRERK 356
Db 256 TPEAVLQSSGLYSLSVYTVPPSSNFGTYTCNV-----DHK 292
Qy 357 PVMVLNPEAGMWQCLSDSGVLLSESNIKYLPFTWSTPEPKSCDKHTPCCPAPBELGG 416
Db 293 P-----SNTKYDKT-----VERKCYE---CPPCAP-P-VAG 320
Qy 417 PSVFLFPKPKDITMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVNAKTKPRREQYN 476
Db 321 PSVFLFPKPKDITMISRTPEVTCVVVDVSHEDPEVQFNWYVDGVEVNAKTKPRREQFN 380
Qy 477 STYRVSVLTVLQDMLNGKEYKKCKVSKNALKAPAEIKTISKAKGQPREPQVYTLPPSRDE 536
Db 381 STFRVSVLTVVHQDMLNGKEYKKCKVSKNALKAPAEIKTISKAKGQPREPQVYTLPPSRDE 440
Qy 537 LTRKQVSLTCLVKGFPYSDIAVESNGQPENNYKTPPVLDSDGSEFLLSKLTVDSRW 596
Db 441 MTKNQVSLTCLVKCFYSDIAVESNGQPENNYKTPPVLDSDGSEFLLSKLTVDSRW 500
Qy 597 QQGNVFSQSVMEALHNHYTQKSLSLSPG 625
Db 501 QQGNVFSQSVMEALHNHYTQKSLSLSPG 529

RESULT 21
AAR46679
ID   AAR46679 standard; protein; 530 AA.
XX
XX   AAR46679;
AC
XX   25-MAR-2003 (revised)
DT   08-AUG-1994 (first entry)
XX
XX   CD4-IgG2 chimeric heavy chain.
XX
XX   CD4; gamma; heavy chain; chimeric; chimaeic; immunoconjugate; HIV;
KM   human immunodeficiency virus; radionuclide; toxin; therapy; treatment;
KM   imaging; detection; targeting; immunoglobulin; IgG.
XX
XX   Homo sapiens.
XX
XX   Key      Location/Qualifiers
FH   Region  1..204
FT           /label= CD4 Region.
FT   Region 205..302
FT           /label= CH1 Region.
FT   Region 303..314
FT           /label= Hinge Region.
FT   Region 315..423
FT           /label= CH2 Region.
FT   Region 424..530
FT           /label= CH3 Region.
XX
XX   MO9403191-A1.
XX
XX   17-FEB-1994.
XX
XX   06-AUG-1993; 93WO-US007422.
XX
XX   07-AUG-1992; 92US-00927931.
XX
XX   (PROG-) PROGENICS PHARM INC.

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XX Allaway GP, Maddon PJ;
 PI
 DR MPI: 1994-065392/08.
 DR N-PSDB; AAQ55751.
 XX
 PT Non-peptidyl toxin or radionuclide and CD4-gamma 2 or CD4-IgG2
 PT Immunoconjugates - used to kill HIV-infected cells and to image and
 PT stage HIV infection.
 XX
 PS Disclosure; Fig 4; 142pp; English.
 XX
 CC A tetramer comprising 2 IgG2 heavy chains or two CD4-IgG2 chimeric heavy
 CC chains and two kappa light chains or CD4-kappa light chains (AA04680)
 CC linked to a non-peptidyl toxin or a gamma radiation-emitting radionuclide
 CC of low to moderate cytotoxicity. The resulting immunconjugate comprising
 CC the toxin can be used to kill HIV infected cells and to treat HIV
 CC infected subjects to reduce the population of HIV infected cells. It can
 CC also be used to reduce the likelihood of infection. The immunconjugate
 CC comprising the radionuclide can be used to image HIV infected tissue, to
 CC calculate the stage of HIV infection or the efficacy of an anti-HIV
 CC treatment using the imaging technique and for determining the prognosis
 CC of an HIV infected subject. (Updated on 25-Mar-2003 to correct PN field.)
 CC
 XX
 SQ Sequence 530 AA;

Query Match 62.7%; Score 2141; DB 2; Length 530;

Best Local Similarity 70.0%; Pred. No. 5.4e-109;

Matches 440; Conservative 29; Mismatches 56; Indels 104; Gaps 11;

QY 1 MNRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDVTELTCTASQKSIQFHMKNNOIK 60
 DB 1 MNRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDVTELTCTASQKSIQFHMKNNOIK 60
 QY 61 ILGNQGSFLTKGPSKLNDRADSRRLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYOL 120
 DB 61 ILGNRGSFLTKGPSKLNDRADSRRLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYOL 120
 QY 121 LVEGLTANSDPTHLLOQSLLTLTESPPGSSPVQCSPPGKNIQGSKTLVSQLELDQSG 180
 DB 121 LVEGLTANSDPTHLLOQSLLTLTESPPGSSPVQCSPPGKNIQGSKTLVSQLELDQSG 180
 QY 181 TWTCTVLQNOQKVEFKIDIVLAFQKASISIVKKEGEQVFEPSPLFTVEKLTGSGELMW 240
 DB 181 TWTCTVLQNOQKVEFKIDIVLAF--AST-----KPSV---PPLA----- 216
 QY 241 QAERASSSKSWITFDLKNKEVSVKRVYTOPDKLQMGKKPLHLTLPLPALPQAY--SGNL 297
 DB 217 -----PCSRSTSESTALGCLVVDYFPEPTVSWNSGALSTGVH 255
 QY 298 TLALAEAKTGKLNHEVNLVYMRATQL-QKNILTCVWGPRTSPKMLSLKLENKAKVSKREK 356
 DB 256 TFEPAVLQSSGLYSLSVVTVPSSNFGTQYTCNV-----DHK 292
 QY 357 PVWVNLPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEPKSCDKTHTCPCPAPELDG 416
 DB 293 P-----SNTKVDKT---VERKCCVE---CPPCDAPP-VAG 320
 QY 417 PSYFLFPPPKRQDTLMSRTEPVTCCVVDVSHEDPEVKFWMYVDGVEVNAKTKPREEOYN 476
 DB 321 PSYFLFPPPKRQDTLMSRTEPVTCCVVDVSHEDPEVKFWMYVDGVEVNAKTKPREEOFN 380
 QY 477 STTRVSVLTVLHODMLNGKEYCKVSNKALPAPRIKTSKAKGOREPOVYTLPPSRDE 536
 DB 381 STTRVSVLTVVHODMLNGKQYCKVSNKGLPARIKTSKTKGQREPOVYTLPPSRDE 440
 QY 537 LTKNQVSLTCLVGFYPSDIAVEMESNGOPENNYKTTTPVLDDSGSFFLYSKLTIVKXSM 596
 DB 441 MTNQVSLTCLVGFYPSDIAVEMESNGOPENNYKTTTPVLDDSGSFFLYSKLTIVKXSM 500
 QY 597 QQGNVFCSSVMEALHNHYTQKSLSPG 625
 DB 501 QQGNVFCSSVMEALHNHYTQKSLSPG 529

RESULT 22

AAE37576

ID AAE37576 standard; protein; 449 AA.

XX

XX AAE37576;

AC 27-AUG-2003 (first entry)

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Sequence 449 AA;

Query Match 62.3%; Score 2127; DB 6; Length 449;

Best Local Similarity 66.4%; Pred. No. 2.6e-108;

Matches 427; Conservative 3; Mismatches 7; Indels 206; Gaps 3;

QY 1 MNRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDVTELTCTASQKSIQFHMKNNOIK 60
 DB 1 MNRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDVTELTCTASQKSIQFHMKNNOIK 60
 QY 61 ILGNQGSFLTKGPSKLNDRADSRRLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYOL 120
 DB 61 ILGNRGSFLTKGPSKLNDRADSRRLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYOL 120

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QY 121 LVFGLTANSDTHLQGGSLTTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLQGGSLTTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNGKQKVEFKIDIVLAFQKASSIVYKKEGBOVESFPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLQNGKQKVEFKIDIVLAFQKASSIVYKKEGBOVESFPLAFTVEKLTGSGELMW 240
QY 241 QAEKASSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOLPOYAGSGNLTLA 300
DB 241 QAEKASSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOLPOYAGSGNLTLA 300
QY 204 ----- 203
QY 301 LEAKTGKLGHEVNLVWMRATQLOKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPYWV 360
DB 204 ----- 203
QY 361 LNPBAGMMOCLSDSGOVLLESNIKVLPTWSTPVEPKSCDKTHTPCPCPAPBELLGSPSVF 420
DB 204 -----SADKTHTCPCPCPAPB-VAGPSVF 225
QY 421 LPPPKPDTLMTISRTPEVTCVVVDVSHEDPEVKFMWYVDGEVHNAAKTRPREEOYNSTYR 480
DB 226 LPPPKPDTLMTISRTPEVTCVVVDVSHEDPEVKFMWYVDGEVHNAAKTRPREEOYNSTYR 285
QY 481 VVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 540
DB 286 VVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 345
QY 541 QVSLTCLVKGFPYSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRMWOQGN 600
DB 346 QVSLTCLVKGFPYSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRMWOQGN 405
QY 601 VFSCSVMEHALHNHYTKSLSPG-----LQDENTC 632
DB 406 VFSCSVMEHALHNHYTKSLSPG-----LQDENTC 448

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RESULT 23
AAR26782
ID AAR26782 standard; protein; 432 AA.
XX
AC AAR26782;
XX
DT 24-OCT-2003 (revised)
DT 25-MAR-2003 (revised)
DT 06-FEB-1993 (first entry)
XX
DE CD4-gamma2 chimeric heavy chain homodimer.
XX
KM homodimer; soluble CD4; T cell receptor; CD4 antigen; high recovery;
XX chimeric; increased serum half life; HIV infection; AIDS; ss.
XX
OS Homo sapiens.
OS Chimeric.
XX
FH Key 1. 216
FT Domain /label= CD4
FT Domain 217..325
FT Domain /label= CH2
FT Domain 326..433
FT Domain /label= CH3
XX
PN MO9213947-A1.
XX
PD 20-AUG-1992.
XX
PF 10-FEB-1992; 92MO-US001143.
XX
PR 08-FEB-1991; 91US-00653684.
XX
PA (PROG-) PROGENICS PHARM INC.

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XX
PI Beaudry GA, Maddon PJ;
XX
DR WPI: 1992-300034/36.
XX
DR N-PSDB: AAQ28086.
XX
PT CD4-gamma-2 and CD4-IgG2 chimera(s) and expression vectors - for
PT treatment, prevention and diagnosis of HIV infection.
XX
PS Claim 2; Fig 3; 90pp; English.
XX
CC This sequence represents a CD4-gamma2 chimeric heavy chain homodimer. It
CC was produced by expression of the coding multigenised cDNA (produced as
CC described in AAQ28086) in Dhfr-CHO cells. The protein is efficiently
CC assembled intracellularly and effectively secreted from mammalian cells
CC pref. CHO, COS, or myeloma cells as a homodimer, enabling high recovery
CC and purification from the medium of cells expressing it. It possesses
CC increased serum half-life and has increased avidity for HIV cf. heavy
CC chain dimers. It can inhibit HIV infection of CD4+ cells and block the
CC spread of HIV infection within a patient. Attachment to a detectable
CC marker makes it useful in an assay for HIV or SIV infection, and it can
CC also be linked to toxins, eg diphtheria, pseudomonas exotoxin A (domains
CC I or II) or the deglycosylated A-chain of ricin. (updated on 25-MAR-2003
CC to correct FN field.) (updated on 24-OCT-2003 to standardise OS field)
XX
SQ Sequence 432 AA;

```

Query Match 60.8%; Score 2077; DB 2; Length 432;

Best Local Similarity 66.1%; Pred. NO. 1.4e-105; Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

```

QY 1 MNRGVPFRHLVLVQLALPAAATQGNKVLGKKGDIVELTCTASQKKSIOFMWNSNOIK 60
DB 1 MNRGVPFRHLVLVQLALPAAATQGNKVLGKKGDIVELTCTASQKKSIOFMWNSNOIK 60
QY 61 ILGNQGSFLTKGSKKLNDRADSRRLMDQGNFPLIINKLIEISDITYCEVEDQKEVOL 120
DB 61 ILGNQGSFLTKGSKKLNDRADSRRLMDQGNFPLIINKLIEISDITYCEVEDQKEVOL 120
QY 121 LVFGLTANSDTHLQGGSLTTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLQGGSLTTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNGKQKVEFKIDIVLAFQKASSIVYKKEGBOVESFPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLQNGKQKVEFKIDIVLAFQKASSIVYKKEGBOVESFPLAFTVEKLTGSGELMW 240
QY 241 QAEKASSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOLPOYAGSGNLTLA 300
DB 241 QAEKASSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOLPOYAGSGNLTLA 300
QY 207 ----- 206
QY 301 LEAKTGKLGHEVNLVWMRATQLOKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPYWV 360
DB 207 ----- 206
QY 361 LNPBAGMMOCLSDSGOVLLESNIKVLPTWSTPVEPKSCDKTHTPCPCPAPBELLGSPSVF 420
DB 207 -----KCCVBE--CPCPCPAPB-VAGPSVF 226
QY 421 LPPPKPDTLMTISRTPEVTCVVVDVSHEDPEVKFMWYVDGEVHNAAKTRPREEOYNSTYR 480
DB 227 LPPPKPDTLMTISRTPEVTCVVVDVSHEDPEVKFMWYVDGEVHNAAKTRPREEOYNSTYR 286
QY 481 VVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 540
DB 287 VVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 346
QY 541 QVSLTCLVKGFPYSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRMWOQGN 600
DB 347 QVSLTCLVKGFPYSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRMWOQGN 406
QY 601 VFSCSVMEHALHNHYTKSLSPG 625

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Db 407 VFSCSVMEBALHNHYTKSLSPG 431

RESULT 24
AAR46678 standard; protein; 432 AA.

XX AAR46678;
AC
XX
DT 25-MAR-2003 (revised)
DT 08-AUG-1994 (first entry)
DE CD4-gamma 2 chimeric heavy chain.
XX
XX CD4; gamma; heavy chain; chimeric; immunconjugate; HIV;
KW human immunodeficiency virus; radionuclide; toxin; therapy; treatment;
KW imaging; detection; targeting.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Region 1..204
FT Region /label= CD4 Region.
FT Region 205..216
FT Region /label= Hinge Region.
FT Region 217..325
FT Region /label= CH2 Region.
FT Region 326..432
FT Region /label= CH3 Region.
XX
XX MO9403191-A1.
XX
PD 17-FEB-1994.
XX
PF 06-AUG-1993; 93WO-US007422.
XX
PR 07-AUG-1992; 92US-00927931.
XX
PA (PROG-) PROGENICS PHARM INC.
XX
PI Allaway GP, Maddon PJ;
XX
DR WPI; 1994-065392/08.
DR N-PSDB; AA057750.
XX
XX Non-peptidyl toxin or radionuclide and CD4-gamma 2 or CD4-IgG2
PT immunoconjugates - used to kill HIV-infected cells and to image and
PT stage HIV infection.
XX
XX
PS Disclosure; Fig 3; 142pp; English.
XX
XX A CD4-gamma 2 chimeric heavy chain homodimer is linked to a non-peptidyl
CC toxin or a gamma radiation-emitting radionuclide of low to moderate
CC cytotoxicity. The resulting immunoconjugate comprising the toxin can be
CC used to kill HIV infected cells and to treat HIV infected subjects to
CC reduce the population of HIV infected cells. It can also be used to
CC reduce the likelihood of infection. The immunoconjugate comprising the
CC radionuclide can be used to image HIV infected tissue, to calculate the
CC stage of HIV infection or the efficacy of an anti-HIV treatment using the
CC imaging technique and for determining the prognosis of an HIV infected
CC subject. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 432 AA;
SQ

Query Match 60.8%; Score 2077; DB 2; Length 432;
Best Local Similarity 66.1%; Pred. No. 1,4e-105;
Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

QY 1 MNRGVPRHLLVLTALLPATQGNKVVIGKKGDTVELTCTASQKKSIOFHMKNSNQIK 60
DB 1 MNRGVPRHLLVLTALLPATQGNKVVIGKKGDTVELTCTASQKKSIOFHMKNSNQIK 60
QY 61 ILGNQGSFLTKGSPSKLNDRADRSRLMDQNPFLIIKNLKIENSDTYICEVEDQKEEYQL 120

Db 61 ILGNQGSFLTKGSPSKLNDRADRSRLMDQNPFLIIKNLKIENSDTYICEVEDQKEEYQL 120

QY 121 LVFGILTANSDTHLLQGOSITLTLESPSSSPVQCRSRGNKIQCGKTLVSQLELDQSG 180
DB 121 LVFGILTANSDTHLLQGOSITLTLESPSSSPVQCRSRGNKIQCGKTLVSQLELDQSG 180

QY 181 TWTCTVLQNKQKVEFKIDIVLAFQKASSIYVKKEGEQVEFSFLAFTVEKLTGSQELMW 240
DB 181 TWTCTVLQNKQKVEFKIDIVLAFER----- 206

QY 241 QAEASSSKSWITFDLKNKEVSVKRVTDPKLQMGKULPLHLTLPLQALPYAGSGLTLA 300
DB 207 ----- 206

QY 301 LEAKTGKLEHDEVNLVYMRATOLQKLTCEVWGPTSPKMLSLKENKAUKSKREKPVW 360
DB 207 ----- 206

QY 361 LNPEAGMGCILSDSGQVLLBSNIKVLPWSTPVEPKSCDKHTPCPCPAPELDGSPV 420
DB 207 -----KCCVE---CPCPAPV-VAGPSVF 226

QY 421 LFPKPKDTLMSRTPPEYTCVVVDVSHEDPEVKFMVYDGVENNAKTKPREEQYNSTYR 480
DB 227 LFPKPKDTLMSRTPPEYTCVVVDVSHEDPEVFQFMVYDGVENNAKTKPREEQYNSTYR 286

QY 481 VVSVLTVLHODWLNGEKYCKVSNKALPAPLEKTSISKAGQPREQVYTLTPSRDELTKN 540
DB 287 VVSVLTVLHODWLNGEKYCKVSNKGLPAPLEKTSISKAGQPREQVYTLTPSRDEMTKN 346

QY 541 QVSLTCLVKGFPSPDIAVWBSNGQPENNYKTPPVLSDSGFFLYSLTLYVDSKRWQGN 600
DB 347 QVSLTCLVKGFPSPDIAVWBSNGQPENNYKTPPVLSDSGFFLYSLTLYVDSKRWQGN 406

QY 601 VFSCSVMEBALHNHYTKSLSPG 625
DB 407 VFSCSVMEBALHNHYTKSLSPG 431

RESULT 25
ID AAY85079
ID AAY85079 standard; protein; 432 AA.
XX
AC AAY85079;
XX
DT 19-JUN-2000 (first entry)
XX
DE Human CD4-gamma 2 chimeric heavy chain homodimer amino acid sequence.
XX
XX CD4-gamma 2 chimeric heavy chain homodimer; immunconjugate; treatment;
KW cytotoxic radionuclide; cell surface glycoprotein; prevent; infection;
KW cellular immune response interaction mediator; HIV interaction; staging;
KW prognosis; envelope glycoprotein burden; human.
XX
OS Homo sapiens.
XX
XX US6034223-A.
PN
XX 07-MAR-2000.
PD
XX
PF 07-JUN-1995; 95US-00477460.
XX
XX 07-AUG-1992; 92US-00927931.
PR 06-AUG-1993; 93WO-US007422.
PR 03-FEB-1995; 95US-00379516.
XX
PA (PROG-) PROGENICS PHARM INC.
XX
XX Allaway GP, Maddon PJ;
PI
XX
DR WPI; 2000-269502/23.
DR N-PSDB; AAR98855.

XX New immunoglobulin, used to treat, prevent or image human immune
 PT deficiency virus infection, comprises radionuclide attached to
 PT heterotetramer of CD4-immunoglobulin chimeras.

XX Disclosure: Fig 3, 58pp; English.

CC This sequence represents the human CD4-gamma 2 chimeric heavy chain
 CC homodimer amino acid sequence. The invention relates to an
 CC immunoglobulin comprising a cytotoxic radionuclide and a heterotetramer
 CC of two heavy chains and two light chains. The cytotoxic radionuclide is
 CC linked to either the heavy chains or the light chains, or to all four
 CC chains, directly or through a bifunctional chelator. Both heavy chains
 CC are chimeric CD4-Ig (immunoglobulin) G2 chains encoded by vector CD4-
 CC IgG2HC-PRCMV (ATCC 75193) and both light chains are chimeric CD4-kappa
 CC chains encoded by vector CD4-kLC-PRCMV (ATCC 75194). CD4 is a non-
 CC polymorphic cell surface glycoprotein that is expressed on the surface of
 CC helper T lymphocytes, cells of the monocyte/macrophage lineage and
 CC dendritic cells. CD4 associates with major histocompatibility complex
 CC (MHC) class II molecules on the surface of antigen presenting cells to
 CC mediate efficient cellular immune response interactions. In humans CD4 is
 CC the target of interaction with the human immunodeficiency virus HIV. The
 CC immunoglobulin is used to kill cells infected with HIV, and for treating
 CC or preventing infection. It is also used for imaging HIV-infected tissues
 CC (for staging or prognosis of infection, and for assessing efficacy of
 CC treatments). The immunoglobulin is also used to determine the HIV
 CC envelope glycoprotein burden, once determined, this information is used
 CC in the staging and prognosis of HIV infected patients. The
 CC immunoglobulin should be active against all strains of HIV (since the
 CC CD4-gp120 interaction is essential for infection). The heterotetramers
 CC are assembled intracellularly and secreted efficiently from mammalian
 CC cells, allowing high recovery and purification from the culture medium.
 CC They have longer half-life in serum and greater avidity than heavy chain
 CC dimers

XX Sequence 432 AA;

Query Match 60.8%; Score 2077; DB 3; Length 432;
 Best Local Similarity 66.1%; Pred. No. 1.4e-105;
 Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

QY 1 MNRGVPFRHLLVLTQALLPAATQGNKVLGKGDVLTCTASQKSIQFMKNSNOIK 60
 DB 1 MNRGVPFRHLLVLTQALLPAATQGNKVLGKGDVLTCTASQKSIQFMKNSNOIK 60
 QY 61 ILNGGSLFTKPSKLNDRADSRSLMDQGNPPLIKLKI EDSPTYICEVEDQKEEVQL 120
 DB 61 ILNGGSLFTKPSKLNDRADSRSLMDQGNPPLIKLKI EDSPTYICEVEDQKEEVQL 120
 QY 121 LVFGILTANSDFHLLTLOGSILTLTLESPGSSPSVQCRSPRGKNIQSGKTLVSQLELQDSG 180
 DB 121 LVFGILTANSDFHLLTLOGSILTLTLESPGSSPSVQCRSPRGKNIQSGKTLVSQLELQDSG 180
 QY 181 TWTCVTVLONOKKVEFKIDIVLAFQKASSIYKKEGEVEFSPFLAFTVEKLTGSGELMW 240
 DB 181 TWTCVTVLONOKKVEFKIDIVLAFER----- 206
 QY 241 QAERASSSKSWTTPPLKNKKEVSVKRVTDPKLQWKGKPLPHLTLPLQALPOYAGSGNLTLA 300
 DB 207 ----- 206
 QY 301 LEAKTGKLEHVEVNLVVMRATOLQKNLTCEVWGPTSPKLMLSIKLENKEAKVSKREKPYWV 360
 DB 207 ----- 206
 QY 361 LNPEAGMOCCLSDSGQVLLBSNIVLPTWSTPVEPKSCDKTHTCPCPAPPELLGSPVF 420
 DB 207 -----KCCVVE---CPPCPAPP-VAGSPVF 226
 QY 421 LFPKPKDTLMISRTPEVTVVVDVSHSDPEKFKFNWYDGVVNAKTKRPEEQNSYR 480
 DB 227 LFPKPKDTLMISRTPEVTVVVDVSHSDPEKFKFNWYDGVVNAKTKRPEEQNSTFR 286

QY 481 VWSVLTVLHODWLNKGEKCKVSNKALPAIEKTIKSAKQPRBPQVYTLPPSDELTKN 540
 DB 287 VWSVLTVLHODWLNKGEKCKVSNKALPAIEKTIKSAKQPRBPQVYTLPPSDEMTKN 346
 QY 541 QVSLTCLVKGFPYPSDIAVWESNGQPENNYKTPPVLDSDGSPFLYSKLTVDKSRMOGN 600
 DB 347 QVSLTCLVKGFPYPSDIAVWESNGQPENNYKTPPVLDSDGSPFLYSKLTVDKSRMOGN 406
 QY 601 VFSCSVMEALHNNHYTOKSLSPG 625
 DB 407 VFSCSVMEALHNNHYTOKSLSPG 431

RESULT 26

AAB67322 standard; protein; 432 AA.

AB67322;

23-APR-2001 (first entry)

CD4-gamma2 chimeric heavy chain homodimer protien.

Immunoglobulin; chelator; chimeric; HIV; human immunodeficiency virus.

Homo sapiens.

US6177549-B1.

10-JUN-1999; 99US-00329916.

07-AUG-1992; 92US-00927931.

06-AUG-1993; 93MO-US007422.

03-FEB-1995; 95US-00379516.

07-JUN-1995; 95US-00477460.

(PROG-) PROGENICS PHARM INC.

Maddon PJ, Allaway GP;

WPI; 2001-158582/16.

Immunoglobulin for treating human immunodeficiency virus-infected
 PT subject, consists of cytotoxic radionuclide linked to heterotetramer
 PT comprising two chimeric CD4-IgG2 heavy chains and two chimeric CD4-
 PT kappa/light chains.

Disclosure; Fig 3; 43pp; English.

CC The present invention relates to an immunoglobulin, comprising a
 CC cytotoxic radionuclide linked, directly or via a bifunctional chelator,
 CC to a heterotetramer having two chimeric CD4-IgG2 heavy chains encoded by
 CC an expression vector CD4-IgG2HC-PRCMV and two chimeric CD4-kappa light
 CC chains encoded by an expression vector CD4-kLC-PRCMV. The invention is
 CC useful for killing human immunodeficiency virus (HIV)-infected cells, for
 CC the treatment and prevention of infection with HIV

XX Sequence 432 AA;

Query Match 60.8%; Score 2077; DB 4; Length 432;
 Best Local Similarity 66.1%; Pred. No. 1.4e-105;
 Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

QY 1 MNRGVPFRHLLVLTQALLPAATQGNKVLGKGDVLTCTASQKSIQFMKNSNOIK 60
 DB 1 MNRGVPFRHLLVLTQALLPAATQGNKVLGKGDVLTCTASQKSIQFMKNSNOIK 60
 QY 61 ILNGGSLFTKPSKLNDRADSRSLMDQGNPPLIKLKI EDSPTYICEVEDQKEEVQL 120
 DB 61 ILNGGSLFTKPSKLNDRADSRSLMDQGNPPLIKLKI EDSPTYICEVEDQKEEVQL 120

```

QY 121 LVFGLTANSDTHLLOQSLTLTLSPGSSPSVOCSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDTHLLOQSLTLTLSPGSSPSVOCSPRGKNIQGGKTLVSQLELQDSG 180
QY 181 TWCTVVLQOKKVEFKIDIVLAFOKASSIYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
DB 181 TWCTVVLQOKKVEFKIDIVLAFOKASSIYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
QY 241 QABRASSKSWITFDLKNKEVSVKRTQDPKLOMGKLLPLHLTLPOALPOYAGSGNLTIA 300
DB 241 QABRASSKSWITFDLKNKEVSVKRTQDPKLOMGKLLPLHLTLPOALPOYAGSGNLTIA 300
QY 207 ----- 206
DB 207 ----- 206
QY 301 LEAKTGKLGHEVNLVVMRATQLOKNLTCEWGPSTPKMLSLKENKAKVSKREKPVWV 360
DB 301 LEAKTGKLGHEVNLVVMRATQLOKNLTCEWGPSTPKMLSLKENKAKVSKREKPVWV 360
QY 207 ----- 206
DB 207 ----- 206
QY 361 LNPEAGMOCCLSDSGVLLSNIKVLPWTSTPVEBKSCDKTHTCPCPABELLQGPVVF 420
DB 207 -----KCCVE---CPCPAPP-VAGPSVF 226
QY 421 LFPPKPKDTLMTSRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTRPREEQYNSTR 480
DB 227 LFPPKPKDTLMTSRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTRPREEQYNSTR 286
QY 481 VVSVLTVLHODMLNGEKYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 540
DB 287 VVSVLTVLHODMLNGEKYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 346
QY 541 QVSLTCLVKGFPSPDIKAVEMESNGQPENNYKTPPVLDSDGSFLLYSKLTVDKSRWQGN 600
DB 347 QVSLTCLVKGFPSPDIKAVEMESNGQPENNYKTPPVLDSDGSFLLYSKLTVDKSRWQGN 406
QY 601 VFSCSVMEHALNHYTKSLSPG 625
DB 407 VFSCSVMEHALNHYTKSLSPG 431

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RESULT 27

AAB80883
ID AAB80883 standard; protein; 432 AA.

AC AAB80883;

DT 29-MAY-2001 (first entry)

DE Human CD4-gamma2 chimeric heavy chain homodimer.

KW Human; Anti-HIV; CD4-IgG2 chimeric heterotetramer;

KM Immunoglobulin gamma 2.

XX Homo sapiens.

OS Homo sapiens.

PN US6187748-B1.

PD 13-FEB-2001.

PF 07-JUN-1995; 95US-00485372.

PR 08-FEB-1991; 91US-00653684.

PR 10-FEB-1992; 92WO-US001143.

PR 08-DEC-1992; 92US-00960440.

XX (PROG-) PROGENICS PHARM INC.

PI Maddon PJ, Beaudry GA;

DR MPI; 2001-264981/27.

DR N-P8DB; AAF77829.

XX Inhibiting human immunodeficiency virus (HIV) infection of a CD4+ cell,

PT or treating a subject having CD4+ cells infected with HIV involves using

PT CD4-IgG2 chimeric heterotetramer to form a complex with the HIV.

PS Disclosure; Fig 3; 55pp; English.

XX The present invention relates to a method for inhibiting infection of a
CC CD4+ cell by HIV. The method comprises contacting the HIV with a CD4-IgG2
CC chimeric heterotetramer to form a complex with the HIV (CD4 = cluster of
CC differentiation 4; IgG2 = immunoglobulin gamma 2). CD4 is a cell surface
CC glycoprotein that is expressed primarily on the surface of T cells. In
CC man, CD4 is the target of interaction with HIV. The heterotetramer has
CC two heavy and two light chains which are encoded by expression vectors
CC CD4-IgG2HC-PRCCMV (V1) and CD4-KLC-PRCCMV (V2), respectively. The method
CC is used to inhibit infection of a CD4+ cell by a HIV and to prevent CD4+
CC cells of a subject from becoming infected with HIV. The method is also
CC useful for treating a subject having CD4+ cells infected with HIV. The
CC present sequence is human fusion protein: CD4-gamma2 chimeric heavy chain
CC homodimer. This sequence was used in the method of the present invention
XX

SQ Sequence 432 AA;

Query Match 60.8%; Score 2077; DB 4; Length 432;

Best Local Similarity 66.1%; Pred. No. 1.4e-105; Indels 194; Gaps 3;
Matches 413; Conservative 11; Mismatches 7;

```

QY 1 MNRGVPFRHLVLTQALLPAPATQGNKVLGKGDVLELTCTASQKSIQFMKNSNOIK 60
DB 1 MNRGVPFRHLVLTQALLPAPATQGNKVLGKGDVLELTCTASQKSIQFMKNSNOIK 60
QY 61 ILGNQGSFLTKGPSKLNADRSRSLMDQGNPFLIKNLKIEDSTYICVYEDQKEVQL 120
DB 61 ILGNQGSFLTKGPSKLNADRSRSLMDQGNPFLIKNLKIEDSTYICVYEDQKEVQL 120
QY 121 LVFGLTANSDTHLLOQSLTLTLSPGSSPSVOCSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDTHLLOQSLTLTLSPGSSPSVOCSPRGKNIQGGKTLVSQLELQDSG 180
QY 181 TWCTVVLQOKKVEFKIDIVLAFOKASSIYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
DB 181 TWCTVVLQOKKVEFKIDIVLAFOKASSIYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
QY 241 QABRASSKSWITFDLKNKEVSVKRTQDPKLOMGKLLPLHLTLPOALPOYAGSGNLTIA 300
DB 207 ----- 206
QY 301 LEAKTGKLGHEVNLVVMRATQLOKNLTCEWGPSTPKMLSLKENKAKVSKREKPVWV 360
DB 207 ----- 206
QY 361 LNPEAGMOCCLSDSGVLLSNIKVLPWTSTPVEBKSCDKTHTCPCPABELLQGPVVF 420
DB 207 -----KCCVE---CPCPAPP-VAGPSVF 226
QY 421 LFPPKPKDTLMTSRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTRPREEQYNSTR 480
DB 227 LFPPKPKDTLMTSRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTRPREEQYNSTR 286
QY 481 VVSVLTVLHODMLNGEKYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 540
DB 287 VVSVLTVLHODMLNGEKYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 346
QY 541 QVSLTCLVKGFPSPDIKAVEMESNGQPENNYKTPPVLDSDGSFLLYSKLTVDKSRWQGN 600
DB 347 QVSLTCLVKGFPSPDIKAVEMESNGQPENNYKTPPVLDSDGSFLLYSKLTVDKSRWQGN 406
QY 601 VFSCSVMEHALNHYTKSLSPG 625
DB 407 VFSCSVMEHALNHYTKSLSPG 431

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RESULT 28

ABG71122
ID ABG71122 standard; protein; 432 AA.

AC ABG71122;

XX

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DT 17-JAN-2003 (first entry)
XX CD4-gamma2 chimeric heavy chain of the CD4-IgG2 chimeric protein.
DE CD4-gamma2 chimeric heavy chain of the CD4-IgG2 chimeric protein.
XX CD4-gamma2 chimeric heavy chain of the CD4-IgG2 chimeric protein.
KM CD4-gamma2 heavy chain, human immunodeficiency virus-1; HIV-1; mutant;
  mtein.
OS Homo sapiens.
OS Synthetic.
XX Key
XX Peptide
XX Protein
XX Location/Qualifiers
  1..25
  /label= Signal_peptide
  26..432
  /note= "Mature CD4-gamma2 chimeric heavy chain of the CD4
  -IgG2 chimeric heterotetramer"
XX US6451313-B1.
XX 17-SEP-2002.
XX 07-JUN-1995; 95US-00484681.
XX 08-FEB-1991; 91US-00653684.
XX 10-FEB-1992; 92MO-US001143.
XX 08-DEC-1992; 92US-00960440.
XX (PROG-) PROGENICS PHARM INC.
XX Maddon PJ, Beaudry GA;
XX WPI; 2003-038273/03.
XX N-PSDB; A8555720.
XX Novel CD4-immunoglobulin G2 chimeric heterotetramer neutralizes human
XX immunodeficiency virus-1 with two heavy and light chains encoded by
XX expression vectors designated CD4-IgG2HC-PRCMV and CD4-KLC-PRCMV,
XX respectively.
XX Disclosure: Fig 3A-F; 5app; English.
XX The invention describes a purified CD4-immunoglobulin (Ig)G2 chimeric
XX heterotetramer (I) that neutralizes human immunodeficiency virus-1 (HIV-
XX 1) having two heavy chains encoded by an expression vector designated CD4
XX -IgG2HC-PRCMV, and two light chains encoded by expression vector
XX designated CD4-KLC-PRCMV. (I) and a composition (II) comprising (I) or
XX (I) linked to a toxin, are useful for inhibiting HIV infection of a CD4
XX cell, and preventing a subject being infected with HIV by blocking the
XX spread of HIV infection. This is the amino acid sequence of the CD4-
XX gamma2 chimeric heavy chain of the CD4-IgG2 chimeric heterotetramer
XX useful in inhibiting HIV infection
XX Sequence 432 AA:
SQ
Query Match 60.8%; Score 2077; DB 6; Length 432;
Best Local Similarity 66.1%; Pred. No. 1.4e-105;
Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;
QY 1 MNRGVPFPHLLVQLALLPAAATGKNTVLTCTTAAOKSKIOFMKNSNOIX 60
DB 1 MNRGVPFPHLLVQLALLPAAATGKNTVLTCTTAAOKSKIOFMKNSNOIX 60
QY 1 ILNGSGFLTGKPSKLRADSRSLMDQGNPPLIKLKTIEDSDTYCEVEDQKEEYQL 120
DB 1 ILNGSGFLTGKPSKLRADSRSLMDQGNPPLIKLKTIEDSDTYCEVEDQKEEYQL 120
QY 121 LVFGILTANSDTHLLQGSGLTTLTLESPGSSPSVQCRSPRKNIOGKTLVSQLELDSG 180
DB 121 LVFGILTANSDTHLLQGSGLTTLTLESPGSSPSVQCRSPRKNIOGKTLVSQLELDSG 180
QY 181 TWTCTVLONOKKVEKIDIVLAFQKASSIYKKEGEQVEFSPLATVEKLTSGSELWM 240
DB 181 TWTCTVLONOKKVEKIDIVLAFQKASSIYKKEGEQVEFSPLATVEKLTSGSELWM 240
  181 TWTCTVLONOKKVEKIDIVLAFER----- 206

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QY 241 QAERASSSKSWITFDLANKKEVSVERVTQDPKLGWKKLPLHLTPQALPOYAGSGNLTLA 300
DB 207 ----- 206
QY 301 LEAKTGKLDHQBVLVWRATQLOKNTLCEYWGPTSPKMLSLKLNKEAKVSKREKPVWV 360
DB 207 ----- 206
QY 361 LNPBAGWQGLSDSGVLEESNIKVLPTWSTPVEPKSCDKHTCPCPAPPELLGSPSVF 420
DB 207 -----KCYE--CPCPAPP-VAGPSVF 226
QY 421 LFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVNAKTKRREQDYNSTR 480
DB 227 LFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVNAKTKRREQDYNSTR 286
QY 481 VVSIVLTIVLHODWLNKGEYKCKVSKALPAIEKTSIAKQOPREPOVYTLPPSDELTKN 540
DB 287 VVSIVLTIVHODWLNKGEYKCKVSKALPAIEKTSIAKQOPREPOVYTLPPSDEMTKN 346
QY 541 QVSLTCLVKGFPSPDIAVEMESNGQPENNYKTPPVLDSDGSPFLYKLTVDKSRMOQGN 600
DB 347 QVSLTCLVKGFPSPDIAVEMESNGQPENNYKTPPVLDSDGSPFLYKLTVDKSRMOQGN 406
QY 601 VFSCSVMEALHNHYTQKSLSLSPG 625
DB 407 VFSCSVMEALHNHYTQKSLSLSPG 431

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RESULT 29
AAB19510
ID AAB19510 standard; protein; 481 AA.
XX
XX AAB19510;
XX 09-JAN-2001 (first entry)
XX CD4-IgM fusion protein CH4Pmu.
XX CD4; IgM; human; CD4Pmu; fusion protein; immunoglobulin; HIV; SIV; gp120;
XX therapy; diagnosis.
XX Homo sapiens.
XX Key
XX Protein
XX Location/Qualifiers
  1..395
  /note= "CD4 extracellular region"
  400..481
  /note= "IgM heavy chain partial sequence"
XX US6117656-A.
XX 12-SEP-2000.
XX 07-JUN-1995; 95US-00479353.
XX 22-JAN-1988; 88US-00147351.
XX 23-JAN-1989; 89US-00299596.
XX 09-JUN-1992; 92US-00896781.
XX 12-APR-1993; 93US-00057952.
XX 04-FEB-1994; 94US-00191708.
XX (GEO) GEN HOSPITAL CORP.
XX Seed B;
XX WPI; 2000-586558/55.
XX N-PSDB; AAS0662.
XX CD4-immunoglobulin fusion proteins, useful for targeting gp120 of HIV or
XX SIV.

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PS Example 1; Col 49-60; 39pp; English.
XX
CC The present sequence is that of fusion protein CD4Pmu comprising the
CC extracellular portion of CD4, which binds to HIV gp120, linked at its C-
CC terminus to the human IgM heavy chain. To obtain the fusion protein, DNA
CC encoding CD4 was linked to IgM DNA at the Pst site upstream of the CH2
CC region (see A450663). Fusion protein CD4Pmu and a nucleic acid encoding
CC it are claimed. Also claimed are a vector comprising the nucleic acid,
CC and a method of producing the fusion protein in secreted form using a
CC transformed host cell. The fusion protein may further comprise a
CC therapeutic agent, radiolabel or NMR imaging agent. The fusion protein
CC can be administered to an animal (including humans) for treatment of HIV
CC or SIV infection, and can also be used in assays for HIV or SIV, imaging
CC and tissue status. IgM fusion proteins such as CD4Pmu provide complement-
CC mediated immunity.
XX
SQ Sequence 481 AA;
Query Match 60.5%; Score 2066; DB 3; Length 481;
Best Local Similarity 83.8%; Pred. No. 6,1e-105;
Matches 415; Conservative 19; Mismatches 37; Indels 24; Gaps 6;
QY 1 MNRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHWKNSNOIK 60
DB 1 MNRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHWKNSNOIK 60
QY 61 ILGNQGSFLLTGKPSKLNDRADSRSLMDQGNPFLIKNLKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILGNQGSFLLTGKPSKLNDRADSRSLMDQGNPFLIKNLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDFHLQOGSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDFHLQOGSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNOKKVEFKIDIVLAFOKASSIYKKEGEVEFSFPLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQNOKKVEFKIDIVLAFOKASSIYKKEGEVEFSFPLAFVTEKLTGSGELMW 240
QY 241 QAEKASSSSKSWITFDLKNKEVSVKRVTOPKLOMGKKLPLHLTLPLQALPOYAGSGLTLTA 300
DB 241 QAEKASSSSKSWITFDLKNKEVSVKRVTOPKLOMGKKLPLHLTLPLQALPOYAGSGLTLTA 300
QY 301 LEAKTGKGLHQBENLVVMBRATOLQKULTCEVWGPTSPKLMLSLKLENKEAKVSKREKPYWV 360
DB 301 LEAKTGKGLHQBENLVVMBRATOLQKULTCEVWGPTSPKLMLSLKLENKEAKVSKREKPYWV 360
QY 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWGSTPVEBPKSCDHTHCPCPAPABELG--GPS 418
DB 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWGSTPVEBPKSCDHTHCPCPAPABELG--GPS 418
QY 419 VFLFPKPKDPTLMIS--RTPEVTCVVVDVSHEDPEVKFMNYVDGVEVHNAKTKPR-----E 472
DB 419 VFLFPKPKDPTLMIS--RTPEVTCVVVDVSHEDPEVKFMNYVDGVEVHNAKTKPR-----E 472
QY 473 EQYNSTYRVVSVLTV 487
DB 473 EQYNSTYRVVSVLTV 487
QY 465 ESGPTTYKVTSTLTIT 479
DB 465 ESGPTTYKVTSTLTIT 479
RESULT 30
AA59171
ID AA59171 standard; protein; 481 AA.
XX
AC AA59171;
XX
DT 14-MAR-2000 (fibrin entry)
XX
DE CD4-Ig fusion protein CD4Pmu.
XX
KW HIV; extracellular; CD4; gp120; immunoglobulin; Ig; fusion protein;
XX secreted protein; SIV infection; medicament.
OS Synthetic.
```

```
OS Homo sapiens.
XX
PN CA1340741-C.
XX
PD 14-SEP-1999.
XX
PF 20-JAN-1989; 89CA-00588749.
XX
PR 20-JAN-1989; 89CA-00588749.
XX
PA (GENO ) GEN HOSPITAL CORP.
XX
PI Seed B;
XX
PI WPI; 2000-063015/06.
XX
DR N-PSDB; A4248204.
XX
PT New fusion gene encoding immunoglobulin-CD4 fusion proteins, useful in
PT the treatment of HIV or simian immunodeficiency virus infections.
XX
PS Example 1; Page 54-60; 89pp; English.
XX
CC The invention provides a fusion gene encoding a fusion protein that
CC comprises an extracellular CD4 DNA sequence or its fragment which binds
CC to HIV gp120 when fused to an immunoglobulin (Ig) chain and the DNA
CC sequence of an Ig heavy or light chain, where the DNA sequence encoding
CC the variable region has been replaced with the DNA sequence which encodes
CC extracellular CD4 or its gp120 binding fragment. The fusion protein is
CC capable of being secreted. The fusion proteins are useful for treating
CC HIV or SIV infections in animals, preferably humans. They are also useful
CC for producing medicaments which can be used for treating HIV or SIV
CC infections in humans. The present sequence represents the fusion protein
CC CD4Pmu where the CD4 is linked to human IgG1 at the Pst site upstream of
CC the CH2 region
XX
SQ Sequence 481 AA;
Query Match 60.5%; Score 2066; DB 3; Length 481;
Best Local Similarity 83.8%; Pred. No. 6,1e-105;
Matches 415; Conservative 19; Mismatches 37; Indels 24; Gaps 6;
QY 1 MNRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHWKNSNOIK 60
DB 1 MNRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHWKNSNOIK 60
QY 61 ILGNQGSFLLTGKPSKLNDRADSRSLMDQGNPFLIKNLKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILGNQGSFLLTGKPSKLNDRADSRSLMDQGNPFLIKNLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDFHLQOGSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDFHLQOGSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNOKKVEFKIDIVLAFOKASSIYKKEGEVEFSFPLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQNOKKVEFKIDIVLAFOKASSIYKKEGEVEFSFPLAFVTEKLTGSGELMW 240
QY 241 QAEKASSSSKSWITFDLKNKEVSVKRVTOPKLOMGKKLPLHLTLPLQALPOYAGSGLTLTA 300
DB 241 QAEKASSSSKSWITFDLKNKEVSVKRVTOPKLOMGKKLPLHLTLPLQALPOYAGSGLTLTA 300
QY 301 LEAKTGKGLHQBENLVVMBRATOLQKULTCEVWGPTSPKLMLSLKLENKEAKVSKREKPYWV 360
DB 301 LEAKTGKGLHQBENLVVMBRATOLQKULTCEVWGPTSPKLMLSLKLENKEAKVSKREKPYWV 360
QY 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWGSTPVEBPKSCDHTHCPCPAPABELG--GPS 418
DB 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWGSTPVEBPKSCDHTHCPCPAPABELG--GPS 418
QY 419 VFLFPKPKDPTLMIS--RTPEVTCVVVDVSHEDPEVKFMNYVDGVEVHNAKTKPR-----E 472
DB 419 VFLFPKPKDPTLMIS--RTPEVTCVVVDVSHEDPEVKFMNYVDGVEVHNAKTKPR-----E 472
QY 408 VSVFVP--PRDGFPGNPKRSKLIQCATGFSR--QIQVSWLRBKGQVGSVTTDDQVQABAK 464
DB 408 VSVFVP--PRDGFPGNPKRSKLIQCATGFSR--QIQVSWLRBKGQVGSVTTDDQVQABAK 464
```

QY 473 EQYNSTRVSVLTIV 487
 Db 465 ESGPTTYKVTSTLTI 479

RESULT 31

ID AAY51081 standard; protein; 481 AA.

AC AAY51081;

DT 23-MAR-2000 (first entry)

DE Human fusion protein CD4Pmu.

KW Fusion protein; human; CD4; Igm; immunoglobulin; gp120;
 anti-human immunodeficiency virus; CD4Pmu.

OS Homo sapiens.

OS Synthetic.

PN US6004781-A.

PD 21-DEC-1999.

PF 04-FEB-1994; 94US-00191708.

PR 22-JAN-1988; 88US-00147351.

PR 23-JAN-1988; 89US-00299586.

PR 09-JUN-1992; 92US-00886781.

PR 12-APR-1993; 93US-00057952.

PA (GHEO) GEN HOSPITAL CORP.

PI Seed B;

DR WPI: 2000-085792/07.

DR N-PSDB; AA244064.

PS Fusion protein useful for the treatment of human immunodeficiency virus.

PS Example 1; Col 49-58; 39pp; English.

CC This invention describes a novel nucleic acid (I) encoding a fusion

CC protein comprising a DNA sequence encoding amino acids 1-173 of CD4 (II)

CC and a DNA sequence encoding a human immunoglobulin (Ig) heavy or light

CC chain (III). The products of the invention have anti-human

CC immunodeficiency virus (HIV) activity and are capable of binding to

CC gp120. The fusion protein is useful for treating human immunodeficiency

CC virus (HIV) or simian immunodeficiency virus (SIV). This sequence

CC represents the fusion protein CD4Pmu which is constructed from CD4 linked

CC to human Igm upstream of the CH2 region

CC

CC

CC

CC

CC

CC

CC

CC

Db 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIVYKKEGQVEFSPLAFTVEKLTGSGELMW 240

QY 241 QAERASSSSKSWITFDLKNKEVSVRVYQDPKLGKGLPHLTLPLQALPYAGSGNTLTA 300

Db 241 QAERASSSSKSWITFDLKNKEVSVRVYQDPKLGKGLPHLTLPLQALPYAGSGNTLTA 300

QY 301 LEAKTGKHOEVLNVNRATQLOKNTLCEVWGPTSPPLMLSLKLENKAKVSKREKVMV 360

Db 301 LEAKTGKHOEVLNVNRATQLOKNTLCEVWGPTSPPLMLSLKLENKAKVSKREKVMV 360

QY 361 LNPBAGWMOCLLSDSGVGLSESNIKVLPTWSTPVEPSCDKTHCPCPAPELIG--GPS 418

Db 361 LNPBAGWMOCLLSDSGVGLSESNIKVLPTWSTPVEPSCDKTHCPCPAPELIG--GPS 418

QY 419 VFLEPPPKKDTLM-ISRTPVTCVVVDVSHEDPEVKFNWYGVGVANAKTKPR-----E 472

Db 408 VSVFVP--PROGFCPCPKSKLICQATGFSR--QIQVSWLRREGQVSGVTTDQVQAEAK 464

QY 473 EQYNSTRVSVLTIV 487

Db 465 ESGPTTYKVTSTLTI 479

RESULT 32

ID AAP93011 standard; protein; 481 AA.

AC AAP93011;

DT 25-MAR-2003 (revised)

DT 03-AUG-1992 (first entry)

DE Genetic construct which encodes CD4 linked to human Igm at the Pst site

DE upstream of the CH2 region (fusion protein CD4Pmu).

KW Fusion protein; immunoglobulin-like molecule; HIV; SIV; therapy;

OS diagnosis; CD4; gp120; binding fragment; glycoprotein; variable region.

OS Homo sapiens.

PN EP25262-A.

PD 26-JUL-1989.

PF 20-JAN-1989; 89EP-00100913.

PR 22-JAN-1988; 88US-00147351.

PA (GHEO) GEN HOSPITAL CORP.

PI Seed B;

DR WPI: 1989-214472/30.

DR N-PSDB; AAN90359.

PS Immunoglobulin-CD4 fusion proteins - used for treating HIV or SIV

PS infections or detecting HIV or SIV in sample.

PS Example; Table 4, Page 41-47; 68pp; English.

CC The fusion protein genes of the invention pref. comprises cDNA sequences

CC which encode CD4 or a fragment which binds gp120 ligated to an expression

CC plasmid which encodes an antibody in which the variable region of the

CC gene has been deleted (see WO87-02671). The CD4 portion of the fusion

CC protein may comprise the complete CD4 sequence, the 370 AA extracellular

CC region and the membrane spanning domain, or the extracellular region. The

CC Ig heavy chain is pref. from Igm, IgG1 or IgG3. The following are

CC specifically claimed: fusion proteins CD4lambda1, CD4mu, CD4Pmu,

CC CD4lambda1, and CD4mu (No. 67608), pCD4lambda (No. 67609) and

CC pCD4lambda1 (No. 67610). (Updated on 25-MAR-2003 to correct PA field.)

CC

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CC

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Query Match          60.3%; Score 2058; DB 1; Length 481;
Best Local Similarity 83.6%; Pred. No. 1.7e-104;
Matches 414; Conservative 19; Mismatches 38; Indels 24; Gaps 6;

QY 1 MNRGVPFRHLILVLOLALIPAAATQGNKVVLGKKGDTVELTCTASQKKSIOFHMKSNQIK 60
    |||
DB 1 MNRGVPFRHLILVLOLALIPAAATQGNKVVLGKKGDTVELTCTASQKKSIOFHMKSNQIK 60
QY 61 ILGNQSPFLTKGSPSKLNDRAISRSLMDQGNPLIINKLKIEDSDTYICEVEQKEEVOL 120
    |||
DB 61 ILGNQSPFLTKGSPSKLNDRAISRSLMDQGNPLIINKLKIEDSDTYICEVEQKEEVOL 120
QY 121 LVFGLTANSPTHLLOGQSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
    |||
DB 121 LVFGLTANSPTHLLOGQSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEVFEFPFLAFYVEKLTGSGELMW 240
    |||
DB 181 TWTCTVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEVFEFPFLAFYVEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
    |||
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
QY 301 LEAKTGKLEHVEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVVW 360
    |||
DB 301 LEAKTGKLEHVEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVVW 360
QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEPKSCDKTHTCPAPABELG--GPS 418
    |||
DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEPKSCDKTHTCPAPABELG--GPS 418
QY 419 VLFPPKPKDTLMIS--RTPEVTCVVDVSHDEPEVKNVVDGEVYHNAKTKRP-----E 472
    |||
DB 419 VLFPPKPKDTLMIS--RTPEVTCVVDVSHDEPEVKNVVDGEVYHNAKTKRP-----E 472
QY 473 EQYNSTRVYVSLTV 487
    |||
DB 473 EQYNSTRVYVSLTV 487
QY 465 ESGPTTYKYTSTLTI 479
    |||
DB 465 ESGPTTYKYTSTLTI 479

RESULT 33
AA51080
ID AA51080 standard; protein; 436 AA.
XX
AC AA51080;
XX
DT 23-MAR-2000 (first entry)
XX
DE Human fusion protein CD4mg.
XX
KW Fusion protein; human; CD4; IgM; immunoglobulin; gp120;
XX
KW anti-human immunodeficiency virus; CD4mg.
XX
OS Homo sapiens.
XX
OS Synthetic.
XX
XX US6004781-A.
XX
XX 21-DEC-1999.
XX
XX 04-FEB-1994; 94US-00191708.
XX
XX 22-JAN-1988; 88US-00147351.
XX
XX 23-JUN-1989; 89US-0029596.
XX
XX 09-JUN-1992; 92US-00896781.
XX
XX 12-APR-1993; 93US-00057952.
XX
XX PA (GEHO ) GEN HOSPITAL CORP.
XX
XX Seed B;
XX
XX WPI, 2000-085792/07.

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DR N-PSDB; AA244063.
XX
XX Fusion protein useful for the treatment of human immunodeficiency virus.
XX
XX Example 1; Col 41-50; 39pp; English.
XX
CC This invention describes a novel nucleic acid (I) encoding a fusion
CC protein comprising a DNA sequence encoding amino acids 1-173 of CD4 (II)
CC and a DNA sequence encoding a human immunoglobulin (Ig) heavy or light
CC chain (III). The products of the invention have anti-human
CC immunodeficiency virus (HIV) activity and are capable of binding to
CC gp120. The fusion protein is useful for treating human immunodeficiency
CC virus (HIV) or simian immunodeficiency virus (SIV). This sequence
CC represents the fusion protein CD4mg which is constructed from CD4 linked
CC to human IgM upstream of the CH1 region
XX
SQ Sequence 436 AA;
XX
Query Match          60.1%; Score 2053.5; DB 3; Length 436;
Best Local Similarity 92.9%; Pred. No. 2.6e-104;
Matches 405; Conservative 4; Mismatches 10; Indels 17; Gaps 3;

QY 1 MNRGVPFRHLILVLOLALIPAAATQGNKVVLGKKGDTVELTCTASQKKSIOFHMKSNQIK 60
    |||
DB 1 MNRGVPFRHLILVLOLALIPAAATQGNKVVLGKKGDTVELTCTASQKKSIOFHMKSNQIK 60
QY 61 ILGNQSPFLTKGSPSKLNDRAISRSLMDQGNPLIINKLKIEDSDTYICEVEQKEEVOL 120
    |||
DB 61 ILGNQSPFLTKGSPSKLNDRAISRSLMDQGNPLIINKLKIEDSDTYICEVEQKEEVOL 120
QY 121 LVFGLTANSPTHLLOGQSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
    |||
DB 121 LVFGLTANSPTHLLOGQSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEVFEFPFLAFYVEKLTGSGELMW 240
    |||
DB 181 TWTCTVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEVFEFPFLAFYVEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
    |||
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
QY 301 LEAKTGKLEHVEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVVW 360
    |||
DB 301 LEAKTGKLEHVEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVVW 360
QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEPKSCDKTHTCPAPABELGSPVF 420
    |||
DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEPKSCDKTHTCPAPABELGSPVF 420
QY 421 LFPKPKDTLMISRTTP 436
    |||
DB 421 LFPKPKDTLMISRTTP 436
QY 407 ---PRAKLTSPSARTP 419
    |||
DB 407 ---PRAKLTSPSARTP 419

RESULT 34
AA59170
ID AA59170 standard; protein; 474 AA.
XX
AC AA59170;
XX
DT 14-MAR-2000 (first entry)
XX
DE CD4-Ig fusion protein CD4mmu.
XX
XX HIV; extracellular; CD4; gp120; immunoglobulin; Ig; fusion protein;
XX
XX secreted protein; SIV infection; medicament.
XX
XX Synthetic.
XX
XX Homo sapiens.
XX
XX CA1340741-C.
XX

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PD 14-SEP-1999.
XX
XX 20-JAN-1989; 89CA-00588749.
XX
XX 20-JAN-1989; 89CA-00588749.
XX
XX (GEHO ) GEN HOSPITAL CORP.
XX
XX Seed B;
XX
XX WPI: 2000-063015/06.
XX N-PSDB; AA248203.
XX
XX New fusion gene encoding immunoglobulin-CD4 fusion proteins, useful in
XX the treatment of HIV or simian immunodeficiency virus infections.
XX
XX Example 1; Page 47-53; 89pp; English.
XX
XX The invention provides a fusion gene encoding a fusion protein that
XX comprises an extracellular CD4 DNA sequence or its fragment which binds
XX to HIV gp120 when fused to an immunoglobulin (Ig) chain and the DNA
XX sequence of an Ig heavy or light chain, where the DNA sequence encoding
XX the variable region has been replaced with the DNA sequence which encodes
XX extracellular CD4 or its gp120 binding fragment. The fusion protein is
XX capable of being secreted. The fusion proteins are useful for treating
XX HIV or SIV infections in animals, preferably humans. They are also useful
XX for producing medicaments which can be used for treating HIV or SIV
XX infections in humans. The present sequence represents the fusion protein
XX CD4mu where the CD4 is linked to human IgG1 at the Met2 site upstream of
XX the CH1 region
XX
XX Sequence 474 AA;
XX
XX Query Match 60.0%; Score 2047.5; DB 3; Length 474;
XX Best Local Similarity 90.7%; Pred. No. 6.1e-104;
XX Matches 409; Conservative 3; Mismatches 18; Indels 21; Gaps 5;
XX
XX 1 MNRGVPFRHLVLVQLALPAPATQGNKVVLGKKGDTVELCTASQKSIQFHWKNSNQIK 60
XX 1 MNRGVPFRHLVLVQLALPAPATQGNKVVLGKKGDTVELCTASQKSIQFHWKNSNQIK 60
XX
XX 61 ILNGQSFLLTKGPKSLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEVQL 120
XX 61 ILNGQSFLLTKGPKSLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEVQL 120
XX
XX 61 ILNGQSFLLTKGPKSLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEVQL 120
XX 61 ILNGQSFLLTKGPKSLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEVQL 120
XX
XX 121 LVFGLTANSDTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
XX 121 LVFGLTANSDTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
XX
XX 121 LVFGLTANSDTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
XX 121 LVFGLTANSDTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
XX
XX 181 TWCTVLQONOKKVEFKIDIVLAFQKASSIVYKKEGEOVESFPPLAFTVEKLTGSGELMW 240
XX 181 TWCTVLQONOKKVEFKIDIVLAFQKASSIVYKKEGEOVESFPPLAFTVEKLTGSGELMW 240
XX
XX 181 TWCTVLQONOKKVEFKIDIVLAFQKASSIVYKKEGEOVESFPPLAFTVEKLTGSGELMW 240
XX 181 TWCTVLQONOKKVEFKIDIVLAFQKASSIVYKKEGEOVESFPPLAFTVEKLTGSGELMW 240
XX
XX 241 QAEARSSSKSWTTPFLKKNKESVVKRVTDPKLQNGKKLPLHLTLFQALPOYAGSGNLTIA 300
XX 241 QAEARSSSKSWTTPFLKKNKESVVKRVTDPKLQNGKKLPLHLTLFQALPOYAGSGNLTIA 300
XX
XX 241 QAEARSSSKSWTTPFLKKNKESVVKRVTDPKLQNGKKLPLHLTLFQALPOYAGSGNLTIA 300
XX 241 QAEARSSSKSWTTPFLKKNKESVVKRVTDPKLQNGKKLPLHLTLFQALPOYAGSGNLTIA 300
XX
XX 301 LEAKTGKXHOEVNLYVMRATOLQKLTCEVWGPTSPKLMLSKLENKAKYSKKEKPYWV 360
XX 301 LEAKTGKXHOEVNLYVMRATOLQKLTCEVWGPTSPKLMLSKLENKAKYSKKEKPYWV 360
XX
XX 301 LEAKTGKXHOEVNLYVMRATOLQKLTCEVWGPTSPKLMLSKLENKAKYSKKEKPYWV 360
XX 301 LEAKTGKXHOEVNLYVMRATOLQKLTCEVWGPTSPKLMLSKLENKAKYSKKEKPYWV 360
XX
XX 361 LNPEAGMWQCLLSDSGOVLLBSNIVLPTWSTPV-----EPKSCD-----KTHPCP 406
XX 361 LNPEAGMWQCLLSDSGOVLLBSNIVLPTWSTPV-----EPKSCD-----KTHPCP 406
XX
XX 361 LNPEAGMWQCLLSDSGOVLLBSNIVLPTWSTPV-----EPKSCD-----KTHPCP 406
XX 361 LNPEAGMWQCLLSDSGOVLLBSNIVLPTWSTPV-----EPKSCD-----KTHPCP 406
XX
XX 407 PCPAPBL-LGGPSV-----FLFPP-KXPDTL 430
XX 407 PCPAPBL-LGGPSV-----FLFPP-KXPDTL 430
XX
XX 421 PKPTPKAKLSTPSARTPAADLSPQRPNSPL 451
XX 421 PKPTPKAKLSTPSARTPAADLSPQRPNSPL 451
XX
XX RESULT 35
XX AAR27278
XX ID AAR27278 standard; protein; 532 AA.

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XX
XX AAR27278;
XX
XX 25-MAR-2003 (revised)
XX 28-JUL-1995 (first entry)
XX
XX CD4:gamma peptide chimeric protein.
XX
XX Fusion protein; CD4; extracellular domain; zeta; eta; gamma;
XX membrane spanning domain; intracellular domain; type I;
XX integral membrane homodimer; TCR; T cell antigen receptor;
XX extracellular domain; mouse; human; receptor; chimera;
XX HBB-ALL tumour cell line; natural killer cell.
XX
XX Homo sapiens.
XX
XX W09215322-A1.
XX
XX 17-SEP-1992.
XX
XX 06-MAR-1992; 92WO-US001785.
XX
XX 07-MAR-1991; 91US-00665961.
XX
XX (GEHO ) GEN HOSPITAL CORP.
XX
XX Seed B, Romeo C, Kolanus W;
XX
XX WPI: 1992-331474/40.
XX N-PSDB; AAQ28706.
XX
XX Therapeutic cells expressing chimeric receptors - directing cellular
XX response to an infective agent, useful in treating HIV-1, AIDS
XX Pneumocystis carinii infections etc.
XX
XX Example 2; Page 74-76; 11app; English.
XX
XX This sequence represents a fusion protein between the CD4 extracellular
XX domain and the gamma protein membrane spanning domain and intracellular
XX domain. The Fc-receptor-associated gamma chain is expressed in cell
XX surface complexes with additional polypeptides, some of which mediate
XX ligand recognition, and others which have undefined function. Gamma bears
XX a homodimeric structure and overall organisation very similar to that of
XX zeta (see also AAQ28704), and is a component of both the mast
XX cell/basophil high affinity IGE receptor, Fc-epsilon-RI, which consists
XX of at least three distinct polypeptide chains and one of the low affinity
XX receptors for IgG, represented in mice by Fc-gamma-RII-alpha. In the
XX production of the CD4 receptor chimera, the gamma cDNA was isolated from
XX the HBB-ALL tumour cell line and from human natural killer cells. The
XX gamma cDNA was joined to the extracellular domain by engineering a BamHI
XX site just upstream of the membrane spanning domain, by a BamHI site
XX naturally present a few residues upstream of the membrane spanning
XX domain. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 532 AA;
XX
XX Query Match 59.7%; Score 2039; DB 2; Length 532;
XX Best Local Similarity 99.0%; Pred. No. 2e-103;
XX Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;
XX
XX 1 MNRGVPFRHLVLVQLALPAPATQGNKVVLGKKGDTVELCTASQKSIQFHWKNSNQIK 60
XX 1 MNRGVPFRHLVLVQLALPAPATQGNKVVLGKKGDTVELCTASQKSIQFHWKNSNQIK 60
XX
XX 61 ILNGQSFLLTKGPKSLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEVQL 120
XX 61 ILNGQSFLLTKGPKSLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEVQL 120
XX
XX 61 ILNGQSFLLTKGPKSLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEVQL 120
XX 61 ILNGQSFLLTKGPKSLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEVQL 120
XX
XX 121 LVFGLTANSDTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
XX 121 LVFGLTANSDTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
XX
XX 121 LVFGLTANSDTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
XX 121 LVFGLTANSDTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
XX
XX 181 TWCTVLQONOKKVEFKIDIVLAFQKASSIVYKKEGEOVESFPPLAFTVEKLTGSGELMW 240
XX 181 TWCTVLQONOKKVEFKIDIVLAFQKASSIVYKKEGEOVESFPPLAFTVEKLTGSGELMW 240
XX

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Db      181 |TWTCTVLQNOQKKEFKIDIVLAFQKASSIVYKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
Qy      241 |QAEKASSSKSWITFPDLKKEVSVKRVTOPKLOMGKKLPLHLTPQALPOYAGSGNLTIA 300
Db      241 |QAEKASSSKSWITFPDLKKEVSVKRVTOPKLOMGKKLPLHLTPQALPOYAGSGNLTIA 300
Qy      301 |LEAKTGKLEHGVNLVYMRATQLOKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPYWV 360
Db      301 |LEAKTGKLEHGVNLVYMRATQLOKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPYWV 360
Qy      361 |LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
Db      361 |LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401

RESULT 36
AAR78678
ID      AAR78678 standard; protein; 532 AA.
XX
AC      AAR78678;
XX
DT      16-APR-1996 (first entry)
XX
DE      T-cell receptor etc.
XX
KW      Chimeric receptor; CD4; T-cell receptor etc; HIV; cytolysis;
KM      human immunodeficiency virus; adoptive immunotherapy.
XX
OS      Homo sapiens.
XX
PN      MO9521528-A1.
PD      17-AUG-1995.
XX
PF      12-JAN-1995; 95WO-US000454.
XX
PR      14-FEB-1994; 94US-00195395.
PR      02-AUG-1994; 94US-00284391.
XX
PA      (GEHO ) GEN HOSPITAL CORP.
XX
PI      Seed B, Banapour B, Romeo C, Kolanus W;
XX
DR      WPI; 1995-292893/38.
DR      N-PSDB; AAQ96124.
XX
PT      Target cytolysis of HIV-infected cells - by chimeric CD4 receptor-bearing
PT      cells.
XX
PS      Example 2; Page 78-79; 118pp; English.
XX
CC      Fusion proteins comprising the extracellular domain of CD4 fused to T-
CC      cell receptor zeta, gamma or eta (AAR78676-78, respectively) were
CC      expressed in CV1 using a vaccine virus vector. These CD4:zeta, CD4:gamma
CC      and CD4:eta chimeric receptors mediated cytolysis of targets expressing
CC      HIV gp120/41
XX
SQ      Sequence 532 AA;

Query Match      59.7%; Score 2039; DB 2; Length 532;
Best Local Similarity 99.0%; Pred. No. 2e-103; Indels 2; Gaps 1;
Matches 357; Conservative 1; Mismatches 1;

Qy      1 |MNRGVFPRHLTLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIQFHKNSNQIK 60
Db      1 |MNRGVFPRHLTLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIQFHKNSNQIK 60
Qy      61 |ILGNQGSFLTKGSKINDRADSRSLMDQGNFPLIINKLKIENSDTYICEVEDQKEVOL 120
Db      61 |ILGNQGSFLTKGSKINDRADSRSLMDQGNFPLIINKLKIENSDTYICEVEDQKEVOL 120
Qy      121 |LVFGLTANSDFTHLQGGSLTLTLSEPPGSSPVQGRSPRGKNIQGGKTLVSQLELQDSG 180

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Db      121 |LVFGLTANSDFTHLQGGSLTLTLSEPPGSSPVQGRSPRGKNIQGGKTLVSQLELQDSG 180
Qy      181 |TWTCTVLQNOQKKEFKIDIVLAFQKASSIVYKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
Db      181 |TWTCTVLQNOQKKEFKIDIVLAFQKASSIVYKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
Qy      241 |QAEKASSSKSWITFPDLKKEVSVKRVTOPKLOMGKKLPLHLTPQALPOYAGSGNLTIA 300
Db      241 |QAEKASSSKSWITFPDLKKEVSVKRVTOPKLOMGKKLPLHLTPQALPOYAGSGNLTIA 300
Qy      301 |LEAKTGKLEHGVNLVYMRATQLOKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPYWV 360
Db      301 |LEAKTGKLEHGVNLVYMRATQLOKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPYWV 360
Qy      361 |LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
Db      361 |LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401

RESULT 37
AAR89458
ID      AAR89458 standard; protein; 532 AA.
XX
AC      AAR89458;
XX
DT      26-SEP-1996 (first entry)
XX
DE      CD4:eta fusion protein.
XX
KW      CD7; transmembrane domain; chimeric receptor; CD5; CD34; CH2; CH3; IgG1;
KM      human; CD4; HIV; proteolactosin alpha-helix; T cell; B cell; neutrophil;
KM      dendritic cell; therapy; mammal; infection.
XX
OS      Synthetic.
XX
PN      MO9603883-A1.
PD      15-FEB-1996.
XX
PF      26-JUL-1995; 95WO-US009468.
XX
PR      02-AUG-1994; 94US-00284391.
PR      24-FEB-1995; 95US-00394388.
XX
PA      (GEHO ) GEN HOSPITAL CORP.
XX
PI      Seed B, Banapour B, Romeo C, Kolanus W;
XX
DR      WPI; 1996-129034/13.
DR      N-PSDB; AAT10803.
XX
PT      Membrane-bound chimeric receptor comprising extracellular portion
PT      including CD4 fragment - cells expressing receptor can be used for
PT      treatment of HIV infection.
XX
PS      Example 2; Page 80-81; 134pp; English.
XX
CC      AAT10801-T10803 represent membrane bound proteinaceous chimeric receptors
CC      of the invention. This sequence represents the CD4:eta chimera. The
CC      transmembrane region of the chimeric receptor acts to separate the
CC      intracellular and extracellular domains of the chimera, and contains a
CC      portion of the CD7 (see AAR89440), CD5 or CD34 transmembrane domains.
CC      Alternatively, the extracellular portion of the receptor can be separated
CC      from the intracellular domain by the hinge, CH2 and CH3 domains of human
CC      IgG1 (see AAR89441). The extracellular portion of the chimeric receptor
CC      contains a fragment of CD4 (amino acids 1-394 or 1-200 of the CD4
CC      sequence, see AAR89450 and AAR89451) which specifically recognizes and
CC      binds HIV-infected cells, but does not mediate HIV infection. The
CC      extracellular domain of the receptor is separated from the cell membrane
CC      by 48 or 72 angstroms, or by one or more proteinaceous alpha-helices. The
CC      cells expressing the receptor are preferably T cells, B cells,
CC      neutrophils, or dendritic cells. The therapeutic cells expressing the

```

CC chimeric receptor are administered to a mammal to treat HIV infection
 XX
 SQ Sequence 532 AA;
 Query Match 59.7%; Score 2039; DB 2; Length 532;
 Best Local Similarity 99.0%; Pred. No. 2e-103;
 Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;
 QY 1 MNRGVPFRHLILVQLALLPATQGNKVLGKKGDTVELCTASOKKSIOFHMKNNOIK 60
 DB 1 MNRGVPFRHLILVQLALLPATQGNKVLGKKGDTVELCTASOKKSIOFHMKNNOIK 60
 QY 61 ILGNQGSFLTKGSPSKLNDRADSRSLMDQGNFPLIIKLIKIEDSDTYICEVEDQKEVQL 120
 DB 61 ILGNQGSFLTKGSPSKLNDRADSRSLMDQGNFPLIIKLIKIEDSDTYICEVEDQKEVQL 120
 QY 121 LVFGLTANSDTHLLOQGSILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSDTHLLOQGSILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWCTVLONQKVEFKIDIVLAFQKASSIVYKKEGQVEFSFPLAFTVEKLTSGGLMW 240
 DB 181 TWCTVLONQKVEFKIDIVLAFQKASSIVYKKEGQVEFSFPLAFTVEKLTSGGLMW 240
 QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDQPKLQMGKPLHLITLPQALPOYAGSGNLTTLA 300
 DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDQPKLQMGKPLHLITLPQALPOYAGSGNLTTLA 300
 QY 301 LEAKTGKLEHVEVNLVVMRATOLQKNLTCEVWGPTSPKLMSTLKENKEAKVSKREKPVW 360
 DB 301 LEAKTGKLEHVEVNLVVMRATOLQKNLTCEVWGPTSPKLMSTLKENKEAKVSKREKPVW 360
 QY 361 LNPEAGMWOCCLSDSGVLLSENIKVLPTWSTPV--EPKSC 399
 DB 361 LNPEAGMWOCCLSDSGVLLSENIKVLPTWSTPVHADPKLC 401
 RESULT 38
 AAM83141
 ID AAM83141 standard; protein; 532 AA.
 AC AAM83141;
 DT 03-FEB-1999 (first entry)
 DE Chimeric receptor containing human eta polypeptide.
 XX Human; zeta; eta; gamma; membrane-bound chimeric receptor; infection;
 KM tumour; cancer cell; autoimmune-generated cell; T cell receptor; CD3;
 KM CD4; B cell receptor; Fc receptor; pathogen; bacterial; fungal;
 KM protozoan; viral.
 XX Synthetic.
 OS Homo sapiens.
 PN US5843728-A.
 PD 01-DEC-1998.
 PP 05-APR-1995; 95US-00417495.
 PR 07-MAR-1991; 91US-00665961.
 PR 06-MAR-1992; 92US-00847566.
 PR 28-FEB-1994; 94US-00203866.
 PA (GEMO) GEN HOSPITAL CORP.
 PI Romeo C, Kolanus W, Seed B;
 DR MPI; 1999-044582/04.
 DR N-PSDB; AAV70157.
 PT Membrane-bound chimeric receptors - comprising extracellular portion

PT which recognises and binds a target cell and an intracellular portion of
 PT e.g. a T-cell receptor.
 XX
 PS Claim 11; Col 45-46; 57pp; English.
 CC The present invention describes DNA encoding a membrane-bound chimeric
 CC receptor comprising: (a) an extracellular portion that specifically
 CC recognises and binds a target cell or a target infective agent; and (b)
 CC an intracellular portion of a T-cell receptor CD3, zeta or eta
 CC polypeptide, a B-cell receptor polypeptide or an Fc receptor polypeptide.
 CC The present sequence represents a chimeric receptor containing the human
 CC eta polypeptide. Cells expressing chimeric receptors of the present
 CC invention can be administered to mammals in order to destroy pathogens
 CC (e.g. bacteria, fungi, protozoa or viruses, especially HIV), cancer cells
 CC or autoimmune-generated cells
 XX
 SQ Sequence 532 AA;
 Query Match 59.7%; Score 2039; DB 2; Length 532;
 Best Local Similarity 99.0%; Pred. No. 2e-103;
 Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;
 QY 1 MNRGVPFRHLILVQLALLPATQGNKVLGKKGDTVELCTASOKKSIOFHMKNNOIK 60
 DB 1 MNRGVPFRHLILVQLALLPATQGNKVLGKKGDTVELCTASOKKSIOFHMKNNOIK 60
 QY 61 ILGNQGSFLTKGSPSKLNDRADSRSLMDQGNFPLIIKLIKIEDSDTYICEVEDQKEVQL 120
 DB 61 ILGNQGSFLTKGSPSKLNDRADSRSLMDQGNFPLIIKLIKIEDSDTYICEVEDQKEVQL 120
 QY 121 LVFGLTANSDTHLLOQGSILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSDTHLLOQGSILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWCTVLONQKVEFKIDIVLAFQKASSIVYKKEGQVEFSFPLAFTVEKLTSGGLMW 240
 DB 181 TWCTVLONQKVEFKIDIVLAFQKASSIVYKKEGQVEFSFPLAFTVEKLTSGGLMW 240
 QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDQPKLQMGKPLHLITLPQALPOYAGSGNLTTLA 300
 DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDQPKLQMGKPLHLITLPQALPOYAGSGNLTTLA 300
 QY 301 LEAKTGKLEHVEVNLVVMRATOLQKNLTCEVWGPTSPKLMSTLKENKEAKVSKREKPVW 360
 DB 301 LEAKTGKLEHVEVNLVVMRATOLQKNLTCEVWGPTSPKLMSTLKENKEAKVSKREKPVW 360
 QY 361 LNPEAGMWOCCLSDSGVLLSENIKVLPTWSTPVHADPKLC 401
 DB 361 LNPEAGMWOCCLSDSGVLLSENIKVLPTWSTPVHADPKLC 401
 RESULT 39
 AAR27276
 ID AAR27276 standard; protein; 575 AA.
 AC AAR27276;
 DT 25-MAR-2003 (revised)
 DT 28-JUL-1995 (first entry)
 DE CD4: zeta peptide chimeric protein.
 XX Fusion protein; CD4; extracellular domain; zeta; eta; gamma;
 KM membrane spanning domain; intracellular domain; type I;
 KM integral membrane homodimer; TCR; T cell antigen receptor;
 KM extracellular domain; mouse; human; receptor; chimeric;
 KM Hsp-ALB tumour cell line; natural killer cell.
 XX Homo sapiens.
 OS
 FH Key Location/Qualifiers
 FT Protein 1..399
 PT /note= "CD4 extracellular domain"

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FT Protein 400..575
FT /note="Zeta membrane spanning and intracellular domain"
XX
XX
XX MO9215322-A1.
XX
XX 17-SEP-1992.
XX
XX
XX 06-MAR-1992; 92MO-US001785.
XX
XX 07-MAR-1991; 91US-00665961.
XX
XX (GEHO ) GEN HOSPITAL CORP.
XX
XX Seed B, Romeo C, Kolanus W;
XX
XX MPI: 1992-331474/40.
XX
XX N-PSDB; AAQ28704.
XX
XX Therapeutic cells expressing chimeric receptors - directing cellular
XX PT response to an infective agent, useful in treating HIV-1, AIDS
XX PT Pneumocystis carinii infections etc.
XX
XX
XX Example 2; Page 72-73; 114pp; English.
XX
XX This sequence represents a fusion protein between the CD4 extracellular
XX CC domain and the zeta protein membrane spanning domain and intracellular
XX CC domain. Zeta is a 32 kD type I integral membrane homodimer which has a 9
XX CC residue extracellular domain and a 112/113 residue intracellular domain
XX CC for mouse and human protein respectively. In the production of the CD4
XX CC receptor chimera, the zeta cDNA was isolated from the HPB-ALL tumour cell
XX CC line and from human natural killer cells. The zeta cDNA was joined to the
XX CC extracellular domain of an engineered form of CD4 possessing a BamHI site
XX CC just upstream of the membrane spanning domain, by a BamHI site naturally
XX CC present a few residues upstream of the membrane spanning domain. (Updated
XX CC on 25-MAR-2003 to correct PN field.)
XX
XX
XX Sequence 575 AA;
SQ
Query Match 59.7%; Score 2039; DB 2; Length 575;
Best Local Similarity 99.0%; Pred. No. 2.2e-103;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;
QY 1 MNRGVFPRHLLLVQLALLPAATQGNKVVLGKGDVVELTCTASQKSIQFHMKNNSNQIK 60
DB 1 MNRGVFPRHLLLVQLALLPAATQGNKVVLGKGDVVELTCTASQKSIQFHMKNNSNQIK 60
QY 61 ILGNQGSFLTKGSPSKLNDRADSRRLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILGNQGSFLTKGSPSKLNDRADSRRLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDPHLLQGSLLTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDPHLLQGSLLTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVTVLQNOKKVEFKIDIVVLAFOKASSIYVKKGEQVEFSPLAFTVEKLTSGSELWM 240
DB 181 TWTCVTVLQNOKKVEFKIDIVVLAFOKASSIYVKKGEQVEFSPLAFTVEKLTSGSELWM 240
QY 241 QAEERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOLPQYAGSGLTLA 300
DB 241 QAEERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOLPQYAGSGLTLA 300
QY 301 LEAKTGKGLHOEVNLYVMRATQLOKNTCEVWGPTSPKMLSLKLENKEAKVSKKEKPVWV 360
DB 301 LEAKTGKGLHOEVNLYVMRATQLOKNTCEVWGPTSPKMLSLKLENKEAKVSKKEKPVWV 360
QY 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTPVHADPKLC 401
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ID AAR78676 standard; protein; 575 AA.
XX
XX AAR78676;
XX
XX 16-APR-1996 (first entry)
XX
XX T-cell receptor zeta.
XX
XX Chimeric receptor; CD4; T-cell receptor zeta; HIV; cytolysis;
XX KW human immunodeficiency virus; adoptive immunotherapy.
XX
XX Homo sapiens.
XX
XX MO9521528-A1.
XX
XX 17-AUG-1995.
XX
XX 12-JAN-1995; 95MO-US000454.
XX
XX 14-FEB-1994; 94US-00195395.
XX
XX 02-AUG-1994; 94US-00284391.
XX
XX (GEHO ) GEN HOSPITAL CORP.
XX
XX Seed B, Banapour B, Romeo C, Kolanus W;
XX
XX MPI: 1995-292893/38.
XX
XX N-PSDB; AAQ96122.
XX
XX Target cytolysis of HIV-infected cells - by chimeric CD4 receptor-bearing
XX PT cells.
XX
XX Example 2; Page 76-77; 118pp; English.
XX
XX Fusion proteins comprising the extracellular domain of CD4 fused to T-
XX CC cell receptor zeta, gamma or eta (AAR78676-78, respectively) were
XX CC expressed in CV1 using a vaccine virus vector. These CD4:zeta, CD4:gamma
XX CC and CD4:eta chimeric receptors mediated cytolysis of targets expressing
XX CC HIV gp120/41
XX
XX
XX Sequence 575 AA;
SQ
Query Match 59.7%; Score 2039; DB 2; Length 575;
Best Local Similarity 99.0%; Pred. No. 2.2e-103;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;
QY 1 MNRGVFPRHLLLVQLALLPAATQGNKVVLGKGDVVELTCTASQKSIQFHMKNNSNQIK 60
DB 1 MNRGVFPRHLLLVQLALLPAATQGNKVVLGKGDVVELTCTASQKSIQFHMKNNSNQIK 60
QY 61 ILGNQGSFLTKGSPSKLNDRADSRRLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILGNQGSFLTKGSPSKLNDRADSRRLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDPHLLQGSLLTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDPHLLQGSLLTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVTVLQNOKKVEFKIDIVVLAFOKASSIYVKKGEQVEFSPLAFTVEKLTSGSELWM 240
DB 181 TWTCVTVLQNOKKVEFKIDIVVLAFOKASSIYVKKGEQVEFSPLAFTVEKLTSGSELWM 240
QY 241 QAEERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOLPQYAGSGLTLA 300
DB 241 QAEERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOLPQYAGSGLTLA 300
QY 301 LEAKTGKGLHOEVNLYVMRATQLOKNTCEVWGPTSPKMLSLKLENKEAKVSKKEKPVWV 360
DB 301 LEAKTGKGLHOEVNLYVMRATQLOKNTCEVWGPTSPKMLSLKLENKEAKVSKKEKPVWV 360
QY 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTPVHADPKLC 401
```

[illegible]

Dd		121	LVFGLTANSDPHLLQGSULTLTLESPSSPSVQCRRSPGKNGIKGGKTLSVSQLEIQDSC	180			
Oy		181	TWTCVLQNOKKVEFKIDIVLAFQKASSIYVKKEGEQVFSFPPLAFTVEKLTGSGELMW	240			
Dd		181	TWTCTVLQNOKKVEFKIDIVLAFQKASSIYVKKEGEQVFSFPPLAFTVEKLTGSGELMW	240			
Oy		241	QAERASSSKSNITTPDLKNKEVSVKRVTDOPKLQMGKKLPILHTLPALPOYAGSGLTTLA	300			
Dd		241	QAERASSSKSNITTPDLKNKEVSVKRVTDOPKLQMGKKLPILHTLPALPOYAGSGLTTLA	300			
Oy		301	LEAKTGKHQEVNLVWRBATQLQKRLTCVWGMPSPKMLSLKLEVKEAKVSRREKPVNV	360			
Dd		301	LEAKTGKHQEVNLVWRBATQLQKRLTCVWGMPSPKMLSLKLEVKEAKVSRREKPVNV	360			
Oy		361	LNPEAGWMQCLISDSGOVLLESNIKVLPTWSTPVP--EPKSC	399			
Dd		361	LNPEAGWMQCLISDSGOVLLESNIKVLPTWSTPVPADPKLC	401			
RESULT 42							
ID	AAW02213	standard; protein; 575 AA.					
XX	AAW02213;						
AC	AAW02213;						
XX							
DT	11-NOV-1996	(first entry)					
XX							
DE	CD4:T-cell receptor zeta chain chimaeric receptor.						
XX							
KM	Chimaeric receptor; cellular immunity; adoptive immunotherapy; CD4;						
KM	human immunodeficiency virus type 1; HIV-1; AIDS; therapy;						
KM	T-cell receptor zeta chain; cytotoxic T lymphocyte; CTL.						
OS	Homo sapiens.						
XX							
Ft	Key	Location/Qualifiers					
Ft	Domain	1..393					
Ft		/label= "Extracellular domain"					
Ft		/note= "CD4 extracellular domain"					
Ft	Region	394..396					
Ft		/label= "Linker"					
Ft		/note= "encoding DNA contains a BamHI site used for fusion construction"					
Ft	Region	397..575					
Ft		/note= "region of fusion derived from zeta chain, preferred signal-transducing portions for constructs of the invention are amino acids 421-575, 423-255, 438-455, 461-494, 494-528, 400-420 and 421-462"					
Ft		400..437					
Ft	Domain	438..437					
Ft		/label= "Transmembrane domain"					
Ft		/note= "zeta chain transmembrane domain"					
Ft	Domain	438..575					
Ft		/label= "Intracellular domain"					
Ft		/note= "zeta chain intracellular domain"					
PN	WO9625953-A1.						
XX							
PD	29-AUG-1996.						
XX							
Pf	25-JAN-1996;	96WO-US001056.					
XX							
PR	24-FEB-1995;	95US-00394176.					
XX							
PA	(GHEO) GEN HOSPITAL CORP.						
XX							
PI	Seed B, Romeo C, Kolanus W;						
XX							
DR	WPI, 1996-402134/40.						
DR	N-PSDB; AAT36758.						
PT	Direction of cellular immune response using therapeutic cell expressing 2						
PT	chimaeric receptors - comprising region binding to target cell and region to						
PT	that signals target cell destruction, or CD28 region, partic. for						

PT eliminating HIV-infected cells.
XX
PS Claim 7; Page 74-75; 120pp; English.
XX
CC A chimeric receptor (AAW00213) comprises the extracellular domain of an
CC engineered form of the CD4 cellular receptor for HIV and the
CC transmembrane and intracellular regions, including the cytoplasmic signal-
CC transducing portion, of the human T-cell receptor zeta chain; the region
CC of the fusion is shown in AAW0221. It can be obd. by inserting a gene
CC fusion (AAT36758) into a vaccinia virus vector and expression in host
CC cells. Chimeric receptors comprising CD4 fused to zeta, eta (see also
CC AAW02215) or Fc receptor gamma (see also AAW02214) chains are capable of
CC directing cytotoxic T lymphocytes to specifically recognise and kill
CC cells expressing HIV gp120, thus providing a therapy for AIDS
XX
SQ Sequence 575 AA;

Query Match 59.7%; Score 2039; DB 2; Length 575;
Best Local Similarity 99.0%; Pred. No. 2,2e-103;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 NMRGVPFRHLVLVQLALPAAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60
DB 1 NMRGVPFRHLVLVQLALPAAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60
QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDTHLLQGSGLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDTHLLQGSGLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCTVLONOKKVEFKIDIVLAFOKASSIVYKKEGQVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLONOKKVEFKIDIVLAFOKASSIVYKKEGQVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTQDPKLOMGKCLPLHLTLPOALPOYAGSGLTLA 300
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTQDPKLOMGKCLPLHLTLPOALPOYAGSGLTLA 300
QY 301 LEAKTGKLGHOEVNVLVWMRATQLOKNLTCEVWGPTSPKMLSLKLENKAQVSKREKPVWV 360
DB 301 LEAKTGKLGHOEVNVLVWMRATQLOKNLTCEVWGPTSPKMLSLKLENKAQVSKREKPVWV 360
QY 361 LNPEAGMOCCLSDSGQVLESNIKVLPTWSTPVHADPKLC 401
DB 361 LNPEAGMOCCLSDSGQVLESNIKVLPTWSTPVHADPKLC 401

RESULT 43
AAW83140
ID AAW83140 standard; protein; 575 AA.
XX
AC AAW83140;
XX
DT 03-FEB-1999 (first entry)
XX
DE Chimeric receptor containing human zeta polypeptide.
XX
KW Human; zeta; eta; gamma; membrane-bound chimeric receptor; infection;
KW tumor; cancer cell; autoimmune-generated cell; T cell receptor; CD3;
KW CD4; B cell receptor; Fc receptor; pathogen; bacterial; fungal;
KW protozoan; viral.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX US5843728-A.
PN
XX 01-DEC-1998.
PD
XX 05-APR-1995; 95US-00417495.
PF

XX
XX 07-MAR-1991; 91US-00665961.
PR
XX 06-MAR-1992; 92US-00847566.
PR
XX 28-FEB-1994; 94US-00203866.
XX
PA (GEHO) GEN HOSPITAL CORP.
PI
XX Romeo C, Kolanus W, Seed B;
PI
XX WPI; 1999-044582/04.
DR
XX N-PSDB; AAV70156.
XX
PT Membrane-bound chimeric receptors - comprising extracellular portion
PT which recognises and binds a target cell and an intracellular portion of
PT e.g. a T-cell receptor.
XX
XX Example 2; Col 39-42; 57pp; English.
PS
XX The present invention describes DNA encoding a membrane-bound chimeric
XX receptor comprising: (a) an extracellular portion that specifically
XX recognises and binds a target cell or a target infective agent; and (b)
XX an intracellular portion of a T-cell receptor CD3, zeta or eta
XX polypeptide, a B-cell receptor polypeptide or an Fc receptor polypeptide.
XX The present sequence represents a chimeric receptor containing the human
XX zeta polypeptide. Cells expressing chimeric receptors of the present
XX invention can be administered to mammals in order to destroy pathogens
XX (e.g. bacteria, fungi, protozoa or viruses, especially HIV), cancer cells
XX or autoimmune-generated cells
SQ Sequence 575 AA;

Query Match 59.7%; Score 2039; DB 2; Length 575;
Best Local Similarity 99.0%; Pred. No. 2,2e-103;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 NMRGVPFRHLVLVQLALPAAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60
DB 1 NMRGVPFRHLVLVQLALPAAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60
QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDTHLLQGSGLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDTHLLQGSGLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCTVLONOKKVEFKIDIVLAFOKASSIVYKKEGQVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLONOKKVEFKIDIVLAFOKASSIVYKKEGQVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTQDPKLOMGKCLPLHLTLPOALPOYAGSGLTLA 300
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTQDPKLOMGKCLPLHLTLPOALPOYAGSGLTLA 300
QY 301 LEAKTGKLGHOEVNVLVWMRATQLOKNLTCEVWGPTSPKMLSLKLENKAQVSKREKPVWV 360
DB 301 LEAKTGKLGHOEVNVLVWMRATQLOKNLTCEVWGPTSPKMLSLKLENKAQVSKREKPVWV 360
QY 361 LNPEAGMOCCLSDSGQVLESNIKVLPTWSTPVHADPKLC 401
DB 361 LNPEAGMOCCLSDSGQVLESNIKVLPTWSTPVHADPKLC 401

RESULT 44
AAB07769
ID AAB07769 standard; protein; 458 AA.
XX
AC AAB07769;
XX
DT 07-NOV-2000 (first entry)
XX
DE DNA encoding a human T4 glycoprotein.

```

XX Human; T4 glycoprotein; human immunodeficiency virus; HIV;
KW envelope glycoprotein; AIDS; virus binding.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FH Peptide 1..23
FT /note= "leader sequence"
FT Modified-site /note= "N-linked glycosylation site"
FT /note= "N-linked glycosylation site"
FT Modified-site /note= "N-linked glycosylation site"
FT /note= "N-linked glycosylation site"
FT Domain /note= "transmembrane domain"
FT /note= "transmembrane domain"
FT Domain /note= "transmembrane domain"
FT /note= "cytoplasmic domain"
FT
XX US6093539-A.
XX
XX 25-JUL-2000.
XX
XX 06-JUN-1995; 95US-00466368.
XX
XX 21-AUG-1986; 86US-00898587.
XX 11-JUN-1991; 91US-00713564.
XX 06-JUL-1992; 92US-00909021.
XX 12-DEC-1994; 94US-00354452.
XX
XX (UYCO ) UNIV COLUMBIA NEW YORK.
XX
XX Maddon PJ, Chess L, Axel R, Weiss R, McDougal JS, Littman DR;
XX WPI: 2000-505203/45.
XX DR N-PSDB; AAA59352.
XX
XX New isolated nucleic acid encoding a human T cell surface protein and the
XX soluble surface T4 glycoprotein that it encodes, useful as prophylaxis
XX for treating a subject infected with human acquired immune deficiency
XX syndrome virus.
XX
XX Disclosure; Fig 6A-B; 69pp; English.
XX
XX The present sequence represents a human T4 glycoprotein. An aqueous-
XX soluble polypeptide comprising a portion of a human T4 glycoprotein
XX specifically forms a complex with a human immunodeficiency virus (HIV)
XX envelope glycoprotein. The DNA is useful for producing the soluble
XX surface T4 glycoprotein. The soluble surface T4 glycoprotein is useful as
XX a therapeutic agent, i.e. as prophylaxis for treating a subject infected
XX with an HIV virus. Thus, the soluble T4 glycoprotein is useful for
XX treating human AIDS. The soluble T4 glycoprotein is also useful in
XX diagnostic or screening assays, e.g. for screening inhibitors of virus
XX binding, or for detecting and quantitating T4, T4+ cells and antibodies
XX to T4, which are of diagnostic value for AIDS
XX
XX Sequence 458 AA;
SQ
Query Match 59.7%; Score 2038; DB 3; Length 458;
Best Local Similarity 99.7%; Pred. No. 1.9e-103;
Matches 395; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 181 TWTCVTLQONKQVFEKIDIVLAFQKASSIVYKKEGQVESPPLATVTEKLTGSGELMW 240
DB 181 TWTCVTLQONKQVFEKIDIVLAFQKASSIVYKKEGQVESPPLATVTEKLTGSGELMW 240
QY 241 QAERASSKSMITFDLKNKEVSRYVQDPKLOMGKLPPLHTLTPOLPOYAGSGNLTIA 300
DB 241 QAERASSKSMITFDLKNKEVSRYVQDPKLOMGKLPPLHTLTPOLPOYAGSGNLTIA 300
QY 301 LEAKTGLHGEVNLVVRATQLOKNTLCEVWGPPTSPLYMLSLKLENKAKVSKREKPVWV 360
DB 301 LEAKTGLHGEVNLVVRATQLOKNTLCEVWGPPTSPLYMLSLKLENKAKVSKREKPVWV 360
QY 361 LNPBAGWQCILSDSGVLLSNIKVLPWTSTPVP 396
DB 361 LNPBAGWQCILSDSGVLLSNIKVLPWTSTPVP 396

RESULT 45
AAR27277
ID AAR27277 standard; protein; 462 AA.
XX
XX AAR27277;
AC 25-MAR-2003 (revised)
DT 28-JUL-1995 (first entry)
XX
XX CD4:eta peptide chimeric protein.
XX
XX Fusion protein; CD4; extracellular domain; zeta; eta; gamma;
XX membrane spanning domain; intracellular domain; type I;
XX integral membrane homodimer; TCR; T cell antigen receptor;
XX extracellular domain; mouse; human; receptor; chimera;
XX HPB-ALL tumour cell line; natural killer cell.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FH Peptide 1..399
FT /note= "CD4 extracellular domain"
FT Protein 400..462
FT /note= "Zeta membrane spanning and intracellular domain"
XX
XX W09215322-A1.
XX
XX 17-SEP-1992.
XX
XX 06-MAR-1992; 92MO-US001785.
XX
XX 07-MAR-1991; 91US-00665961.
XX
XX (GEHO ) GEN HOSPITAL CORP.
XX
XX Seed B, Romeo C, Kolanus W;
XX WPI: 1992-331474/40.
XX DR N-PSDB; AAQ28705.
XX
XX Therapeutic cells expressing chimeric receptors - directing cellular
XX response to an infective agent, useful in treating HIV-1, AIDS
XX Pneumocystis carinii infections etc.
XX
XX Example 2; Page 73-74; 114pp; English.
XX
XX This sequence represents a fusion protein between the CD4 extracellular
XX domain and the eta protein membrane spanning domain and intracellular
XX domain. Eta is an isoform of zeta (see also AAR27276) which is a 32 kD
XX type I integral membrane homodimer, which arises by alternate mRNA
XX splicing. It is present in reduced amounts in cells expressing the T cell
XX antigen receptor. Zeta-eta heterodimers are thought to mediate the
XX formation of inositol phosphates, as well as the receptor initiated cell
XX death called apoptosis. In the production of the CD4 receptor chimera,
XX the eta cDNA was isolated from the HPB-ALL tumour cell line and from
XX human natural killer cells. The eta cDNA was joined to the extracellular

```

CC domain of an engineered form of CD4 possessing a BamHI site just upstream
PS of the membrane spanning domain, by a BamHI site naturally present a few
CC residues upstream of the membrane spanning domain. (Updated on 25-MAR-
CC 2003 to correct PN field.)

XX SQ Sequence 462 AA;

Query Match 59.6%; Score 2035; DB 2; Length 462;
Best Local Similarity 98.8%; Pred. No. 2.9e-103;
Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;

```
OY 1 MNRGVPRHLLLVLOALLPAATQGNKVVLGKKGDTVELTCTASQKSIQFMKNSNQIK 60
DB 1 MNRGVPRHLLLVLOALLPAATQGNKVVLGKKGDTVELTCTASQKSIQFMKNSNQIK 60
OY 61 ILGNQGSFLTKGPKSKLNDRAISRSLMDQGNPFLIKNLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILGNQGSFLTKGPKSKLNDRAISRSLMDQGNPFLIKNLKIEDSDTYICEVEDQKEEVOL 120
OY 121 LVFGLTANSDBTHLQGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDBTHLQGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
OY 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYVKEGEQVEFSPFLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYVKEGEQVEFSPFLAFVTEKLTGSGELMW 240
OY 241 QABRASSSSKSWITFDLKNKEVSVKRVTDPKLOMKKKLPLHLTLPOALPOVAGSNLTILA 300
DB 241 QABRASSSSKSWITFDLKNKEVSVKRVTDPKLOMKKKLPLHLTLPOALPOVAGSNLTILA 300
OY 301 LEAKTGKGLHQBENLVVMBRATOLQKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPVWV 360
DB 301 LEAKTGKGLHQBENLVVMBRATOLQKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPVWV 360
OY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPOLC 401
```

RESULT 46
AAR78677
ID AAR78677 standard; protein; 462 AA.

XX AC AAR78677;

XX DT 16-APR-1996 (first entry)

XX DE T-cell receptor gamma.

KM Chimeric receptor; CD4; T-cell receptor gamma; HIV; cytolysis;
KW human immunodeficiency virus; adoptive immunotherapy.

OS Homo sapiens.

XX PN MO9521528-A1.

XX PD 17-AUG-1995.

XX PF 12-JAN-1995; 95WO-US000454.

XX PR 14-FEB-1994; 94US-00195395.

XX PR 02-AUG-1994; 94US-00284391.

XX PA (GEHO) GEN HOSPITAL CORP.

XX PI Seed B, Banapour B, Romeo C, Kolanus W;

XX DR WPI; 1995-292893/38.

XX DR P-PSDB; AA096123.

XX PT Target cytolysis of HIV-infected cells - by chimeric CD4 receptor-bearing
XX cell.

XX XX Example 2; Page 77-78; 118pp; English.

XX CC Fusion proteins comprising the extracellular domain of CD4 fused to T-
XX CC cell receptor zeta, gamma or eta (AAR78676-78, respectively) were
XX CC expressed in CV1 using a vaccine virus vector. These CD4:zeta, CD4:gamma
XX CC and CD4:eta chimeric receptors mediated cytolysis of targets expressing
XX CC HIV gp120/41

XX SQ Sequence 462 AA;

Query Match 59.6%; Score 2035; DB 2; Length 462;
Best Local Similarity 98.8%; Pred. No. 2.9e-103;
Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;

```
OY 1 MNRGVPRHLLLVLOALLPAATQGNKVVLGKKGDTVELTCTASQKSIQFMKNSNQIK 60
DB 1 MNRGVPRHLLLVLOALLPAATQGNKVVLGKKGDTVELTCTASQKSIQFMKNSNQIK 60
OY 61 ILGNQGSFLTKGPKSKLNDRAISRSLMDQGNPFLIKNLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILGNQGSFLTKGPKSKLNDRAISRSLMDQGNPFLIKNLKIEDSDTYICEVEDQKEEVOL 120
OY 121 LVFGLTANSDBTHLQGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDBTHLQGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
OY 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYVKEGEQVEFSPFLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYVKEGEQVEFSPFLAFVTEKLTGSGELMW 240
OY 241 QABRASSSSKSWITFDLKNKEVSVKRVTDPKLOMKKKLPLHLTLPOALPOVAGSNLTILA 300
DB 241 QABRASSSSKSWITFDLKNKEVSVKRVTDPKLOMKKKLPLHLTLPOALPOVAGSNLTILA 300
OY 301 LEAKTGKGLHQBENLVVMBRATOLQKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPVWV 360
DB 301 LEAKTGKGLHQBENLVVMBRATOLQKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPVWV 360
OY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPOLC 401
```

RESULT 47
AAR89457
ID AAR89457 standard; protein; 462 AA.

XX AC AAR89457;

XX DT 26-SEP-1996 (first entry)

XX DE CD4:gamma fusion protein.

KM CD7; transmembrane domain; chimeric receptor; CD5; CD34; CH2; CH3; IgG1;
KW human; CD4; HIV; proteinaceous alpha-helix; T cell; B cell; neutrophil;
KW dendritic cell; therapy; mammal; infection.

OS Synthetic.

XX PN MO9603083-A1.

XX PD 15-FEB-1996.

XX PF 26-JUL-1995; 95WO-US009468.

XX PR 02-AUG-1994; 94US-00284391.

XX PR 24-FEB-1995; 95US-00394388.

XX PA (GEHO) GEN HOSPITAL CORP.

XX PI Seed B, Banapour B, Romeo C, Kolanus W;

XX XX

DR WPI: 1996-123034/13.
 DR N-PSDB; AAT10802.
 PT Membrane-bound chimeric receptor comprising extracellular portion
 PT including CD4 fragment - cells expressing receptor can be used for
 PT treatment of HIV infection.
 XX
 PS Example 2; Page 79; 134pp; English.
 CC AAT10801-110803 represent membrane bound proteinaceous chimeric receptors
 CC of the invention. This sequence represents the CD4:gamma chimera. The
 CC transmembrane region of the chimeric receptor acts to separate the
 CC intracellular and extracellular domains of the chimera, and contains a
 CC portion of the CD7 (see AAR89440), CD5 or CD34 transmembrane domains.
 CC Alternatively, the extracellular portion of the receptor can be separated
 CC from the intracellular domain by the hinge, CH2 and CH3 domains of human
 CC IgG1 (see AAR89441). The extracellular portion of the chimeric receptor
 CC contains a fragment of CD4 (amino acids 1-394 or 1-200 of the CD4
 CC sequence, see AAR89450 and AAR89451) which specifically recognises and
 CC binds HIV-infected cells, but does not mediate HIV infection. The
 CC extracellular domain of the receptor is separated from the cell membrane
 CC by 48 or 72 angstroms, or by one or more proteinaceous alpha-helices. The
 CC cells expressing the receptor are preferably T cells, B cells,
 CC neutrophils, or dendritic cells. The therapeutic cells expressing the
 CC chimeric receptor are administered to a mammal to treat HIV infection
 XX
 SQ Sequence 462 AA:
 Query Match 59.6%; Score 2035; DB 2; Length 462;
 Best Local Similarity 98.8%; Pred. No. 2.9e-103;
 Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;
 QY 1 MNRGVPRHLLVQLALLPAATQGNKVYLGKGDVTELTCTAOKKSIOFHMKNSNOIK 60
 DB 1 MNRGVPRHLLVQLALLPAATQGNKVYLGKGDVTELTCTAOKKSIOFHMKNSNOIK 60
 QY ILNGGSFLTKGPSKLNDRADSRSLMDQGNFPIIKNLKIEDSDTYICEVEDQKEEVQL 120
 DB ILNGGSFLTKGPSKLNDRADSRSLMDQGNFPIIKNLKIEDSDTYICEVEDQKEEVQL 120
 QY 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWCTTVLONOKKVEFKIDIVVLAFOKASSIYKKKEGSEVERSPFLAFVETKLTSSGELMW 240
 DB 181 TWCTTVLONOKKVEFKIDIVVLAFOKASSIYKKKEGSEVERSPFLAFVETKLTSSGELMW 240
 QY 181 TWCTTVLONOKKVEFKIDIVVLAFOKASSIYKKKEGSEVERSPFLAFVETKLTSSGELMW 240
 DB 181 TWCTTVLONOKKVEFKIDIVVLAFOKASSIYKKKEGSEVERSPFLAFVETKLTSSGELMW 240
 QY 241 QAERASSSKSMITFDLKNKEVSVKRVTDPKLQMGKLPMLHTLPQALPOYAGSGNLTLA 300
 DB 241 QAERASSSKSMITFDLKNKEVSVKRVTDPKLQMGKLPMLHTLPQALPOYAGSGNLTLA 300
 QY 301 LEAKTGKLEHGVNVLVWMAATQLOKVLTCFVWGPSPKMLSLIKLENKAKYSKREKPVW 360
 DB 301 LEAKTGKLEHGVNVLVWMAATQLOKVLTCFVWGPSPKMLSLIKLENKAKYSKREKPVW 360
 QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV-- --EPKSC 399
 DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVADPQLC 401
 RESULT 48
 AAM02214
 ID AAM02214 standard; protein; 462 AA.
 XX AAM02214;
 AC 11-NOV-1996 (first entry)
 DT
 XX
 DE CD4:Fc receptor gamma chain chimaeric receptor.
 XX Chimaeric receptor; cellular immunity; adoptive immunotherapy; CD4;
 KW human immunodeficiency virus type 1; HIV-1; AIDS; therapy;

KM Fc receptor gamma chain; cytotoxic T lymphocyte; CTL.
 XX Homo sapiens.
 OS
 XX
 XX
 FT Key
 FT Domain
 FT Location/Qualifiers
 FT 1..393
 FT /label= "Extracellular domain"
 FT /note= "CD4 extracellular domain"
 FT 394..397
 FT Region
 FT /label= linker
 FT /note= "encoding DNA contains a BamHI site used for
 FT fusion construction"
 FT 398..462
 FT /note= "region of fusion derived from gamma chain,
 FT preferred signal-transducing portions for constructs of
 FT the invention are amino acids 421-462 and 402-419"
 FT 400..462
 FT /label= "transmembrane+intracellular_domains"
 FT
 FT MO9625953-A1.
 FT
 FT 29-AUG-1996.
 FT
 FT 25-JAN-1996; 96WO-US001056.
 FT
 FT 24-FEB-1995; 95US-00394176.
 FT
 FT (GENO) GEN HOSPITAL CORP.
 FT
 FT Seed B, Romeo C, Kojanne W;
 FT
 FT WPI: 1996-402134/40.
 DR N-PSDB; AAT36759.
 DR
 XX
 PT Direction of cellular immune response using therapeutic cell expressing 2
 PT chimaeric receptors - comprising region binding to target cell and region
 PT that signals target cell destruction, or CD28 region, partic. for
 PT eliminating HIV-infected cells.
 XX
 PS Claim 7; Page 76; 120pp; English.
 CC A chimaeric receptor (AAM00214) comprises the extracellular domain of an
 CC engineered form of the CD4 cellular receptor for HIV and the
 CC transmembrane and intracellular regions, including the cytolitic signal-
 CC transducing portion, of the human Fc receptor gamma chain; the region of
 CC the fusion is shown in AAM02223. It can be obtd. by inserting a gene
 CC fusion (AAT36759) into a vaccinia virus vector and expression in host
 CC cells. Chimaeric receptors comprising CD4 fused to Fc receptor gamma or T
 CC -cell receptor zeta (see also AAM02213) or eta (AAM02215) chains are
 CC capable of directing cytotoxic T lymphocytes to specifically recognise
 CC and kill cells expressing HIV gp120, thus providing a therapy for AIDS
 XX
 SQ Sequence 462 AA:
 Query Match 59.6%; Score 2035; DB 2; Length 462;
 Best Local Similarity 98.8%; Pred. No. 2.9e-103;
 Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;
 QY 1 MNRGVPRHLLVQLALLPAATQGNKVYLGKGDVTELTCTAOKKSIOFHMKNSNOIK 60
 DB 1 MNRGVPRHLLVQLALLPAATQGNKVYLGKGDVTELTCTAOKKSIOFHMKNSNOIK 60
 QY ILNGGSFLTKGPSKLNDRADSRSLMDQGNFPIIKNLKIEDSDTYICEVEDQKEEVQL 120
 DB ILNGGSFLTKGPSKLNDRADSRSLMDQGNFPIIKNLKIEDSDTYICEVEDQKEEVQL 120
 QY 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWCTTVLONOKKVEFKIDIVVLAFOKASSIYKKKEGSEVERSPFLAFVETKLTSSGELMW 240
 DB 181 TWCTTVLONOKKVEFKIDIVVLAFOKASSIYKKKEGSEVERSPFLAFVETKLTSSGELMW 240

QY 241 QAEKSSSSKSWITFDLKNKEVSVKRVTDPKLOMGKKLPLHLTLPOALPOYAGSGLTLA 300
 DB 241 QAEKSSSSKSWITFDLKNKEVSVKRVTDPKLOMGKKLPLHLTLPOALPOYAGSGLTLA 300
 QY 301 LEAKTGKLGHOEVNLYVMRATQLOKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVWV 360
 DB 301 LEAKTGKLGHOEVNLYVMRATQLOKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVWV 360
 QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVAHADQLC 401
 DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVAHADQLC 401

RESULT 49

AAW83142
 ID AAW83142 standard; protein; 462 AA.
 AC AAW83142;
 XX
 DT 03-FEB-1999 (first entry)
 XX
 DE Chimeric receptor containing mouse gamma polypeptide.
 XX
 KW Human; zeta; eta; gamma; membrane-bound chimeric receptor; infection;
 KW tumour; cancer cell; autoimmune-generated cell; T cell receptor; CD3;
 KW CD4; B cell receptor; Fc receptor; pathogen; bacterial; fungal;
 KW protozoan; viral.

OS Synthetic.
 OS Mus sp.

PN US5843728-A.

PD 01-DEC-1998.

PF 05-APR-1995; 95US-00417495.

PR 07-MAR-1991; 91US-00665961.

PR 06-MAR-1992; 92US-00847566.

PR 28-FEB-1994; 94US-00203866.

PA (GEHO) GEN HOSPITAL CORP.

PI Romeo C, Kolanus W, Seed B;

DR WPI; 1999-044582/04.

DR N-PSDB; AAV70158.

XX Membrane-bound chimeric receptors - comprising extracellular portion
 PT which recognises and binds a target cell and an intracellular portion of
 PT e.g. a T-cell receptor.

XX Example 2; Col 43-46; 57pp; English.

XX The present invention describes DNA encoding a membrane-bound chimeric
 CC receptor comprising: (a) an extracellular portion that specifically
 CC recognises and binds a target cell or a target infective agent; and (b)
 CC an intracellular portion of a T-cell receptor CD3, zeta or eta
 CC polypeptide, a B-cell receptor polypeptide or an Fc receptor polypeptide.
 CC The present sequence represents a chimeric receptor containing the mouse
 CC gamma polypeptide. Cells expressing chimeric receptors of the present
 CC invention can be administered to mammals in order to destroy pathogens
 CC (e.g. Bacteria, fungi, protozoa or viruses, especially HIV), cancer cells
 CC or autoimmune-generated cells

XX Sequence 462 AA;

Query Match 59.6%; Score 2035; DB 2; Length 462;
 Best Local Similarity 98.8%; Pred. No. 2,9e-103;
 Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;

QY 1 NMRGVFRRLLVLQALLPAATQGNKVLGKKGDTVELTCTASQKKSIOFHWKNSNQIX 60

DB 1 NMRGVFRRLLVLQALLPAATQGNKVLGKKGDTVELTCTASQKKSIOFHWKNSNQIX 60
 QY 61 ILGNQGSFLTKPSPKLNDRADSRSLNDQGNPPLIKLKLFEDSTTYICEVDDQEEVQL 120
 DB 61 ILGNQGSFLTKPSPKLNDRADSRSLNDQGNPPLIKLKLFEDSTTYICEVDDQEEVQL 120
 QY 121 LVFGLTANSDDTLNQGOSITLTLESPPGSSPSVOCSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSDDTLNQGOSITLTLESPPGSSPSVOCSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWTCTVLQNKQKVEFKIDIVLAFQKASSIVYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
 DB 181 TWTCTVLQNKQKVEFKIDIVLAFQKASSIVYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
 QY 241 QAEKSSSSKSWITFDLKNKEVSVKRVTDPKLOMGKKLPLHLTLPOALPOYAGSGLTLA 300
 DB 241 QAEKSSSSKSWITFDLKNKEVSVKRVTDPKLOMGKKLPLHLTLPOALPOYAGSGLTLA 300
 QY 301 LEAKTGKLGHOEVNLYVMRATQLOKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVWV 360
 DB 301 LEAKTGKLGHOEVNLYVMRATQLOKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVWV 360
 QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVAHADQLC 401
 DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVAHADQLC 401

RESULT 50

AAW02215
 ID AAW02215 standard; protein; 532 AA.

AC AAW02215;

DT 16-OCT-2003 (revised)

DT 11-NOV-1996 (first entry)

DE CD4:T-cell receptor eta chain chimeric receptor.

XX Chimeric receptor; cellular immunity; adoptive immunotherapy; CD4;
 KW human immunodeficiency virus type 1; HIV-1; AIDS; therapy;
 KW T-cell receptor eta chain; cytotoxic T lymphocyte; CTL.

XX Homo: sapiens.

OS Mus sp.

OS Chimeric.

XX Key

XX Region

XX Region

XX Region

XX Region

XX Region

XX Region

XX Region

XX Region

XX Region

XX Region

XX Region

Location/Qualifiers
 1..393
 /label= "Extracellular domain"
 /note= "CD4 extracellular domain"
 394..396
 /label= "Linker"
 /note= "encoding DNA contains a BamHI site used for
 fusion construction"
 397..532
 /note= "Region of fusion derived from eta chain,
 preferred signal-transducing portions for constructs of
 the invention are amino acids 421-532, 423-455, 438-455,
 461-494, 494-528 or 400-420"
 400..437
 /label= "Transmembrane domain"
 /note= "eta chain transmembrane domain"
 438..575
 /label= "Intracellular domain"
 /note= "eta chain intracellular domain"

W09625953-A1.

29-AUG-1996.

25-JAN-1996; 96WO-US001056.

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PR 24-FEB-1995; 95US-00394176.
XX (GEOH ) GEN HOSPITAL CORP.
XX
XX Seed B, Romeo C, Kolanus W;
XX
XX WPI; 1996-402134/40.
XX N-PSDB; AAT36760.
XX
XX Direction of cellular immune response using therapeutic cell expressing 2
XX chimaeric receptors - comprising region binding to target cell and region
XX that signals target cell destruction, or CD28 region, partic. for
XX eliminating HIV-infected cells.
XX
XX Claim 7; Page 77-78; 120pp; English.
XX
XX A chimeric receptor (AAW00215) comprises the extracellular domain of an
XX engineered form of the CD4 cellular receptor for HIV and the
XX transmembrane and intracellular regions, including the cytolitic signal-
XX transducing portion, of the mouse T-cell receptor eta chain. It can be
XX obtd. by inserting a gene fusion (AAT36760) into a vaccinia virus vector
XX and expression in host cells. Chimaeric receptors comprising CD4 fused to
XX eta (see also AAW02213) or Fc receptor gamma (see also AAW02214)
XX chains are capable of directing cytotoxic T lymphocytes to specifically
XX recognise and kill cells expressing HIV gp120, thus providing a therapy
XX for AIDS. (updated on 16-OCT-2003 to standardise OS field)
XX
XX Sequence 532 AA;
SQ
Query Match 59.6%; Score 2035; DB 2; Length 532;
Best Local Similarity 98.8%; Pred. No. 3.3e-103;
Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;
OY 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGGDTVELTCTASOKSIOFHMKNNSQIK 60
DB 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGGDTVELTCTASOKSIOFHMKNNSQIK 60
OY ILNGGSFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLTIEDSDTYICEVEDQKEEYOL 120
DB ILNGGSFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLTIEDSDTYICEVEDQKEEYOL 120
OY LVFGLTANSDTHLLOGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
DB LVFGLTANSDTHLLOGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
OY LVFGLTANSDTHLLOGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
DB LVFGLTANSDTHLLOGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
OY TWTCVTLNOKKVEFKIDIVLAFQKASSIVYKKEGVEFSFPLAFTVEKLTSSGELMW 240
DB TWTCVTLNOKKVEFKIDIVLAFQKASSIVYKKEGVEFSFPLAFTVEKLTSSGELMW 240
OY TWTCVTLNOKKVEFKIDIVLAFQKASSIVYKKEGVEFSFPLAFTVEKLTSSGELMW 240
DB TWTCVTLNOKKVEFKIDIVLAFQKASSIVYKKEGVEFSFPLAFTVEKLTSSGELMW 240
OY QABRASSSKSMITFDLKNKEVSVKRVTDPKLQMGKPLPLHLTLPOALPOYAGSGNLTIA 300
DB QABRASSSKSMITFDLKNKEVSVKRVTDPKLQMGKPLPLHLTLPOALPOYAGSGNLTIA 300
OY QABRASSSKSMITFDLKNKEVSVKRVTDPKLQMGKPLPLHLTLPOALPOYAGSGNLTIA 300
DB QABRASSSKSMITFDLKNKEVSVKRVTDPKLQMGKPLPLHLTLPOALPOYAGSGNLTIA 300
OY LEAKTGKLEHENVLVVMPATQLOKMLTCEVWGPSPSKMLSLKENKAKVSKBEKPVW 360
DB LEAKTGKLEHENVLVVMPATQLOKMLTCEVWGPSPSKMLSLKENKAKVSKBEKPVW 360
OY LEAKTGKLEHENVLVVMPATQLOKMLTCEVWGPSPSKMLSLKENKAKVSKBEKPVW 360
DB LEAKTGKLEHENVLVVMPATQLOKMLTCEVWGPSPSKMLSLKENKAKVSKBEKPVW 360
OY LNPEAGMQCLLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
DB LNPEAGMQCLLSDSGOVLLESNIKVLPTWSTPVADPQLC 401

```

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KW plasmid PBG381; soluble T4 protein; AIDS; ARC; HIV.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX Peptide 1..23
XX /label= "secretory signal"
XX /note= "hydrophobic"
XX Region 24..117
XX /label= "extracellular"
XX /note= "homology to V-regions"
XX Region 118..132
XX /label= "extracellular"
XX /note= "homology to J-regions"
XX Region 133..397
XX /label= "glycosylated"
XX
XX MO9008198-A.
XX
XX 26-JUL-1990.
XX
XX 18-JAN-1989; 89US-00300096.
XX
XX 18-JAN-1989; 89US-00300096.
XX
XX (HARD ) HARVARD COLLEGE.
XX
XX Letvin NA.
XX
XX WPI; 1990-254040/33.
XX N-PSDB; AAQ05608.
XX
XX Treating or preventing AIDS, ARC or HIV infection - by administering an
XX immunologically effective amt. of soluble T4 protein.
XX
XX Disclosure; Fig 2; 121pp; English.
XX
XX T4-encoding plasmid PBG381 was used to transform Chinese Hamster Ovary
XX cells for the production of truncated T4. Soluble T4 is produced by
XX virtue of the removal of the transmembrane and cytoplasmic domains. The
XX soluble forms may be modified to increase their immunogenicity by
XX addition of an adjuvant such as incomplete Freund's adjuvant. The T4
XX interferes with HIV/T4 interaction and elicits anti-soluble T4 antibody
XX production. See also AAQ05607. (updated on 31-OCT-2002 to add missing OS
XX field.)
XX
XX Sequence 400 AA;
SQ
Query Match 59.5%; Score 2030; DB 2; Length 400;
Best Local Similarity 99.5%; Pred. No. 4.6e-103;
Matches 394; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
OY 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGGDTVELTCTASOKSIOFHMKNNSQIK 60
DB 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGGDTVELTCTASOKSIOFHMKNNSQIK 60
OY ILNGGSFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLTIEDSDTYICEVEDQKEEYOL 120
DB ILNGGSFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLTIEDSDTYICEVEDQKEEYOL 120
OY LVFGLTANSDTHLLOGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
DB LVFGLTANSDTHLLOGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
OY LVFGLTANSDTHLLOGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
DB LVFGLTANSDTHLLOGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
OY TWTCVTLNOKKVEFKIDIVLAFQKASSIVYKKEGVEFSFPLAFTVEKLTSSGELMW 240
DB TWTCVTLNOKKVEFKIDIVLAFQKASSIVYKKEGVEFSFPLAFTVEKLTSSGELMW 240
OY TWTCVTLNOKKVEFKIDIVLAFQKASSIVYKKEGVEFSFPLAFTVEKLTSSGELMW 240
DB TWTCVTLNOKKVEFKIDIVLAFQKASSIVYKKEGVEFSFPLAFTVEKLTSSGELMW 240
OY QABRASSSKSMITFDLKNKEVSVKRVTDPKLQMGKPLPLHLTLPOALPOYAGSGNLTIA 300
DB QABRASSSKSMITFDLKNKEVSVKRVTDPKLQMGKPLPLHLTLPOALPOYAGSGNLTIA 300

```



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FT Domain 421. 458
XX
XX EP330227-A.
XX
XX 30-AUG-1989.
XX
XX 24-FEB-1989; 89EP-00103297.
XX
XX 24-FEB-1988; 88US-00160348.
XX
XX (UYCO-) COLUMBIA UNIV.
XX (SMK) SMITHKLINE BECKMAN CORP.
XX (UYCO) UNIV COLUMBIA NEW YORK.
XX (UYCO) UNIV COLUMBIA NEW YORK.
XX
XX Maddon PJ, Axel R, Sweet RW, Arthos J;
XX WPI; 1989-250337/35.
XX
XX Soluble T4 polypeptide derivs. - inhibitors of extracellular and cell to
XX cell spread of HIV used in prevention and treatment of AIDS.
XX
XX Claim 1; Fig 6; 73pp; English.
XX
XX T4 protein (AAN90619) inhibits extracellular and cell-to-cell spread of
XX HIV. The therapeutic agent consists of amino acids +3-+185 fused to +351-
XX +369; +3-+106 fused to +351-+369; or +3-+185. Also used to identify
XX inhibitors of T4 interactions, as target carrier proteins, and to
XX generate monoclonal antibodies. Above features are: Domain 1 (D, starting
XX at the N-terminal) = leader; D2 = variable-like-1; D3 = joining-like-1;
XX D4 = V2; D5 = J2; D6 = V3; D7 = V4; D8 = V4; D9 = transmembrane;
XX D10 = cytoplasmic; Regions are extracellular cysteines; and the 2 sites
XX are potential N-linked glycosylation sites. (Updated on 25-MAR-2003 to
XX correct PA field.) (Updated on 24-OCT-2003 to standardise OS field)
XX
XX Sequence 458 AA;
SQ
Query Match 59.5%; Score 2030; DB 1; Length 458;
Best Local Similarity 99.5%; Pred. No. 5.3e-103;
Matches 394; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGGDTVELTCTASQKSIQFHMKNNOIK 60
DB 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGGDTVELTCTASQKSIQFHMKNNOIK 60
QY ILNGGSEFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEVQL 120
DB 61 ILNGGSEFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEVQL 120
QY 121 LVFGLTANSSTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
DB 121 LVFGLTANSSTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
QY 181 TWTCVTVLONOKKVEFKIDIVLAFQKASSIYKKEGEOVEFSPLAFTVEKLTSGELMW 240
DB 181 TWTCVTVLONOKKVEFKIDIVLAFQKASSIYKKEGEOVEFSPLAFTVEKLTSGELMW 240
QY 181 TWTCVTVLONOKKVEFKIDIVLAFQKASSIYKKEGEOVEFSPLAFTVEKLTSGELMW 240
DB 181 TWTCVTVLONOKKVEFKIDIVLAFQKASSIYKKEGEOVEFSPLAFTVEKLTSGELMW 240
QY 241 QABRASSSKSMITFDLKNKEVSVKRVTPQPKLQMGKPLPHLTLPQALPOYAGSGNLTLA 300
DB 241 QABRASSSKSMITFDLKNKEVSVKRVTPQPKLQMGKPLPHLTLPQALPOYAGSGNLTLA 300
QY 301 LEAKTGKLGHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKLENKEAKVSKKEKPYW 360
DB 301 LEAKTGKLGHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKLENKEAKVSKKEKPYW 360
QY 361 LNPEAGMWQCLISDSGCVLLSESNIKVLPWTWSTPVQP 396
DB 361 LNPEAGMWQCLISDSGCVLLSESNIKVLPWTWSTPVQP 396
RESULT 54
AAV39826
ID AAV39826 standard; protein; 458 AA.
```

```
XX
XX AAV39826;
AC
XX 03-DEC-1999 (first entry)
XX
XX Soluble human T4 protein.
XX
XX Soluble T4 protein; gT4; human; HIV; binding inhibitor; T4+ cell; AIDS;
XX vaccine; immunisation; therapy.
XX
XX Homo sapiens.
XX
XX US5958678-A.
XX
XX 28-SEP-1999.
XX
XX 12-DEC-1994; 94US-00354452.
XX
XX 21-AUG-1986; 86US-00898587.
XX 11-JUN-1991; 91US-00713564.
XX 06-JUL-1992; 92US-00909021.
XX
XX (UYCO) UNIV COLUMBIA NEW YORK.
XX
XX McDougal JS, Weiss R, Axel R, Littman DR, Maddon PJ, Chess L;
XX WPI; 1999-561025/47.
XX
XX N-PSDB; AAZ20695.
XX
XX Human T4 protein inhibits HIV binding to T4 cells, useful for treating
XX AIDS.
XX
XX Example 3; Fig 6; 58pp; English.
XX
XX This sequence represents the soluble human T4 protein of the invention.
XX The soluble human T4 protein blocks the binding of HIV to T4+ cells and
XX is therefore useful for the treatment of AIDS. Monoclonal antibodies
XX against the T4 protein may be used as vaccines for immunising subjects
XX against AIDS
XX
XX Sequence 458 AA;
SQ
Query Match 59.5%; Score 2030; DB 2; Length 458;
Best Local Similarity 99.5%; Pred. No. 5.3e-103;
Matches 394; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGGDTVELTCTASQKSIQFHMKNNOIK 60
DB 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGGDTVELTCTASQKSIQFHMKNNOIK 60
QY ILNGGSEFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEVQL 120
DB 61 ILNGGSEFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEVQL 120
QY 121 LVFGLTANSSTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
DB 121 LVFGLTANSSTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
QY 181 TWTCVTVLONOKKVEFKIDIVLAFQKASSIYKKEGEOVEFSPLAFTVEKLTSGELMW 240
DB 181 TWTCVTVLONOKKVEFKIDIVLAFQKASSIYKKEGEOVEFSPLAFTVEKLTSGELMW 240
QY 181 TWTCVTVLONOKKVEFKIDIVLAFQKASSIYKKEGEOVEFSPLAFTVEKLTSGELMW 240
DB 181 TWTCVTVLONOKKVEFKIDIVLAFQKASSIYKKEGEOVEFSPLAFTVEKLTSGELMW 240
QY 241 QABRASSSKSMITFDLKNKEVSVKRVTPQPKLQMGKPLPHLTLPQALPOYAGSGNLTLA 300
DB 241 QABRASSSKSMITFDLKNKEVSVKRVTPQPKLQMGKPLPHLTLPQALPOYAGSGNLTLA 300
QY 301 LEAKTGKLGHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKLENKEAKVSKKEKPYW 360
DB 301 LEAKTGKLGHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKLENKEAKVSKKEKPYW 360
QY 361 LNPEAGMWQCLISDSGCVLLSESNIKVLPWTWSTPVQP 396
DB 361 LNPEAGMWQCLISDSGCVLLSESNIKVLPWTWSTPVQP 396
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RESULT 55
ID AAR04032 standard; protein; 2037 AA.
XX
AC AAR04032;
XX
DT 25-MAR-2003 (revised)
DT 31-OCT-2002 (revised)
DT 29-MAY-1990 (first entry)
DE Full length T4 encoded by plasmid pBG381.
XX
KM Soluble T4; pBG381; anti-retroviral agent; AIDS; ARC; HIV; AZT.
XX
OS Synthetic.
XX
PN WO8911860-A.
XX
PD 14-DEC-1989.
XX
PF 08-JUN-1989; 89WO-US002453.
XX
PR 10-JUN-1988; 88US-00204645.
XX
PR 20-APR-1989; 89US-00341080.
XX
PA (BIOI ) BIOGEN NV INC.
PA (GENO ) GEN HOSPITAL CORP.
PA (BIOI ) BIOGEN INC.
XX
PA (BIOI ) BIOGEN INC.
XX
PI Fisher RA, Schooley RT, Hirsch MS, Johnson VA, Walker BD;
XX
DR WPI; 1990-007302/01.
XX
DR N-PSDB; AAQ03006.
XX
PT Combinations of soluble T4 protein and anti-retroviral agent - having
PT synergistic activity in treatment and prevention of AIDS, arc and HIV
PT infection.
XX
PS Disclosure; Fig 2; 100pp; English.
XX
CC X = stop codon. The sequence was deduced from the cDNA insert of pBG183.
CC Soluble T4 constructs may be produced by truncating this sequence to give
CC fragments from position 400 to 799; removing the transmembrane and
CC intracytoplasmic domain whilst retaining the extracellular region
CC responsible for HIV binding. The sol. T4 is combined with an anti-viral
CC agent such as AZT. See also AAQ03005. (Updated on 31-OCT-2002 to add
CC missing OS field.) (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ Sequence 2037 AA;

Query Match 59.5%; Score 2030; DB 2; Length 2037;
Best Local Similarity 99.5%; Pred. No. 2.6e-102;
Matches 394; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 MRGVPFRHLLVLQALLPATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60
DB 403 MRGVPFRHLLVLQALLPATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 462

QY 61 ILGNQSFLLTKGSPSKUNDRADSRSLMDQGNFPLTIKNIKIDSPTVYICEVEDQKEEYVL 120
DB 463 ILGNQSFLLTKGSPSKUNDRADSRSLMDQGNFPLTIKNIKIDSPTVYICEVEDQKEEYVL 522

QY 121 LVFGLTANSDBTHLQSQSLTLTLSPSPGSSPSVQCRSPGKNIQGGKTLVSQLELDQDSG 180
DB 523 LVFGLTANSDBTHLQSQSLTLTLSPSPGSSPSVQCRSPGKNIQGGKTLVSQLELDQDSG 582

QY 181 TWTCVLANQKKVEFKIDIVLAFOQASSIVYKKEGEQVEFSFPLAFTVEKLTGSGEILMW 240
DB 583 TWTCVLANQKKVEFKIDIVLAFOQASSIVYKKEGEQVEFSFPLAFTVEKLTGSGEILMW 642

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QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPPKLOMGSKLLPLHLTLPOALPOYAGSGLTLTA 300
DB 643 QAERASSSKSWITFDLKNKEVSVKRVTDPPKLOMGSKLLPLHLTLPOALPOYAGSGLTLTA 702

QY 301 LEAKTGKLHGEVNLVVMRATQLOKXNLTCFVWGPTSPKIMLSIKLENKEAKVSKREKPVNV 360
DB 703 LEAKTGKLHGEVNLVVMRATQLOKXNLTCFVWGPTSPKIMLSIKLENKEAKVSKREKAVNV 762

QY 361 LNPEAGMWQCLLSDSGQVLLSNTIKVLPWTGSTPVEP 396
DB 763 LNPEAGMWQCLLSDSGQVLLSNTIKVLPWTGSTPVEP 798

RESULT 56
ID AAR07641 standard; protein; 2050 AA.
XX
AC AAR07641;
XX
DT 31-OCT-2002 (revised)
DT 20-DEC-1990 (first entry)
DE Deduced sequence of pBG381 comprising truncated T4 glycoprotein.
XX
KM plasmid pBG381; soluble T4 protein; AIDS; ARC; HIV.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Protein 403..803
FT /label= truncated soluble T4 glycoprotein
XX
PN WO9008198-A.
XX
PD 26-JUL-1990.
XX
PF 18-JAN-1989; 89US-00300096.
XX
PR 18-JAN-1989; 89US-00300096.
XX
PA (HARD ) HARVARD COLLEGE.
XX
PI Letvin NA;
XX
DR WPI; 1990-254040/33.
DR N-PSDB; AAQ05608.
XX
PT Treating or preventing AIDS, ARC or HIV infection - by administering an
PT immunologically effective amt. of soluble T4 protein.
XX
PS Disclosure; Fig 2; 121pp; English.
XX
CC Entire sequence translation of plasmid pBG381 used to transform Chinese
CC Hamster Ovary cells for the production of soluble truncated T4.
CC Transmembrane and cytoplasmic domain-encoding regions are deleted from
CC the T4 CDS to encode a truncated protein. The soluble forms may be
CC modified to increase their immunogenicity by addition of an adjuvant such
CC as incomplete Freund's adjuvant. The T4 interferes with HIV/T4
CC interaction and elicits anti-soluble T4 antibody prodn. See also
CC AAQ05607. (Updated on 31-OCT-2002 to add missing OS field.)
XX
SQ Sequence 2050 AA;

Query Match 59.5%; Score 2030; DB 2; Length 2050;
Best Local Similarity 99.5%; Pred. No. 2.6e-102;
Matches 394; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 MRGVPFRHLLVLQALLPATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60
DB 403 MRGVPFRHLLVLQALLPATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 462

QY 61 ILGNQSFLLTKGSPSKUNDRADSRSLMDQGNFPLTIKNIKIDSPTVYICEVEDQKEEYVL 120

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Db      463 ILNGGSFLLTKGSPSKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEEVQL 522
Oy      121 LVFGLTANSDTHLLQGGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Db      523 LVFGLTANSDTHLLQGGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 582
Oy      181 TWTCVTUQONQKVEFKIDIVVLAFOKASSIYKKEGQVEFSPLAFTVEKLTGSGELMW 240
Db      583 TWTCVTUQONQKVEFKIDIVVLAFOKASSIYKKEGQVEFSPLAFTVEKLTGSGELMW 642
Oy      241 QAERASSSSKSWITFDLKNKEVSVKRVTPDPLQMGKTLPLHLTLPOALPOYAGSGNLTTLA 300
Db      643 QAERASSSSKSWITFDLKNKEVSVKRVTPDPLQMGKTLPLHLTLPOALPOYAGSGNLTTLA 702
Oy      301 LEAKTGKLGHOEVLVVMRATOLQKNLTCEVWGPTSPKLMLSLKLENKEAKVSKREKPVWV 360
Db      703 LEAKTGKLGHOEVLVVMRATOLQKNLTCEVWGPTSPKLMLSLKLENKEAKVSKREKPVWV 762
Oy      361 LNPEAGMWQCLLSDSGVLLSNNIKVLPWTWSTPVP 396
Db      763 LNPEAGMWQCLLSDSGVLLSNNIKVLPWTWSTPVP 798

```

RESULT 57

AAR89450 standard; peptide; 398 AA.

AAR89450;

26-SEP-1996 (first entry)

CD4 D1-D4 domains.

CD7; transmembrane domain; chimeric receptor; CD5; CD34; CH2; CH3; IgG1; human; CD4; HIV; proteinaceous alpha-helix; T cell; B cell; neutrophil; dendritic cell; therapy; mammal; infection.

Homo sapiens.

MO9603883-A1.

15-FEB-1996.

26-JUL-1995; 95WO-US009468.

02-AUG-1994; 94US-00284391.

24-FEB-1995; 95US-00394388.

(GEHO) GEN HOSPITAL CORP.

Seed B, Banapour B, Romeo C, Kolanus W;

WPI, 1996-129034/13.

N-PSDB; AAT10797.

Membrane-bound chimeric receptor comprising extracellular portion including CD4 fragment - cells expressing receptor can be used for treatment of HIV infection.

Example 10; Fig 23; 134pp; English.

This sequence represents the D1-D4 domains of CD4. This sequence is included in the membrane bound proteinaceous chimeric receptor of the invention. The extracellular portion of the chimeric receptor contains a fragment of CD4 (amino acids 1-394 or 1-200 of the CD4 sequence) which specifically recognizes and binds HIV-infected cells, but does not mediate HIV infection. The extracellular domain of the receptor is separated from the cell membrane by 48 or 72 angstroms, or by one or more proteinaceous alpha-helices. The transmembrane region of the chimeric receptor contains a portion of the CD7, CD5 or CD34 transmembrane domain. Alternatively, the extracellular portion of the receptor can also be separated from the intracellular domain by the hinge, CH2 and CH3 domains of human IgG1. The cells expressing the receptor are preferably T cells,

CC B cells, neutrophils, or dendritic cells. The therapeutic cells expressing the chimeric receptor are administered to a mammal to treat HIV infection

Sequence 398 AA;

Query Match 59.4%; Score 2029; DB 2; Length 398;
Best Local Similarity 100.0%; Pred. No. 5, 2e-103;
Matches 394; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

Oy      1 MNRGVPFRHLLVQLALLPAATQGNKVYLGKGDVTELTCTASQKSIQFMKNSNQIK 60
Db      1 MNRGVPFRHLLVQLALLPAATQGNKVYLGKGDVTELTCTASQKSIQFMKNSNQIK 60
Oy      61 ILNGGSFLLTKGSPSKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEEVQL 120
Db      61 ILNGGSFLLTKGSPSKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEEVQL 120
Oy      121 LVFGLTANSDTHLLQGGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Db      121 LVFGLTANSDTHLLQGGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Oy      181 TWTCVTUQONQKVEFKIDIVVLAFOKASSIYKKEGQVEFSPLAFTVEKLTGSGELMW 240
Db      181 TWTCVTUQONQKVEFKIDIVVLAFOKASSIYKKEGQVEFSPLAFTVEKLTGSGELMW 240
Oy      241 QAERASSSSKSWITFDLKNKEVSVKRVTPDPLQMGKTLPLHLTLPOALPOYAGSGNLTTLA 300
Db      241 QAERASSSSKSWITFDLKNKEVSVKRVTPDPLQMGKTLPLHLTLPOALPOYAGSGNLTTLA 300
Oy      301 LEAKTGKLGHOEVLVVMRATOLQKNLTCEVWGPTSPKLMLSLKLENKEAKVSKREKPVWV 360
Db      301 LEAKTGKLGHOEVLVVMRATOLQKNLTCEVWGPTSPKLMLSLKLENKEAKVSKREKPVWV 360
Oy      361 LNPEAGMWQCLLSDSGVLLSNNIKVLPWTWSTPVP 394
Db      361 LNPEAGMWQCLLSDSGVLLSNNIKVLPWTWSTPVP 394

```

RESULT 58

AAR78673 standard; protein; 398 AA.

AAR78673;

12-APR-1996 (first entry)

CD4 domains D1-D4.

Chimeric receptor; CD4; T-cell receptor; HIV; cytolysis; human immunodeficiency virus; adoptive immunotherapy.

Homo sapiens.

MO9521528-A1.

17-AUG-1995.

12-JAN-1995; 95WO-US000454.

14-FEB-1994; 94US-00195395.

02-AUG-1994; 94US-00284391.

(GEHO) GEN HOSPITAL CORP.

Seed B, Banapour B, Romeo C, Kolanus W;

WPI, 1995-292893/38.

N-PSDB; AAQ96103.

Target cytolysis of HIV-infected cells - by chimeric CD4 receptor-bearing cells.

PS Example 10; Fig 23; 118pp; English.

XX Extracellular domains D1-D4 (AAR78673) or D1-D2 (AAR78674) of human CD4
CC are used in the construction of chimeric receptors utilized in the
CC targeted cytolysis of cells expressing HIV envelope proteins on their
CC surface. The chimeric receptors comprise the extracellular domain (pref.
CC amino acids 1-394 or 1-200) of CD4 linked to an intracellular portion,
CC e.g. of T-cell receptor protein zeta

XX Sequence 398 AA;

Query Match 59.3%; Score 2026; DB 2; Length 398;
Best Local Similarity 99.7%; Pred. No. 7,6e-103;
Matches 393; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```

QY 1 MNRGVFRRHLVLVQLALLPAATQGNKVVLGKKGDVTELTCTASQKKSIOFHKNSNOIK 60
DB 1 MNRGVFRRHLVLVQLALLPAATQGNKVVLGKKGDVTELTCTASQKKSIOFHKNSNOIK 60
QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDDTHLLOGOSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDDTHLLOGOSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIYVYKKEGQVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIYVYKKEGQVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPQALPOVAGSGLTLTA 300
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPQALPOVAGSGLTLTA 300
QY 301 LEAKTGKLEHOENVLVMPRATQLOKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPVVW 360
DB 301 LEAKTGKLEHOENVLVMPRATQLOKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPVVW 360
QY 361 LNPEAGMOCCLSDSGVLLSNIKVLPWTWSTPV 394
DB 361 LNPEAGMOCCLSDSGVLLSNIKVLPWTWSTPV 394

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RESULT 59

AAB19509 standard; protein; 416 AA.

09-JAN-2001 (first entry)

CD4-IgM fusion protein CH4Mmu.

CD4; IgM; human; CD4Mmu; fusion protein; immunoglobulin; HIV; SIV; gp120;
therapy; diagnosis.

Homo sapiens.

Location/Qualifiers

1..395 /note="CD4 extracellular region"

400..416 /note="IgM heavy chain partial sequence"

US6117656-A.

12-SEP-2000.

07-JUN-1995; 95US-00479353.

22-JAN-1988; 88US-00147351.

23-JAN-1989; 89US-00299596.

PR 09-JUN-1992; 92US-00896781.

PR 12-APR-1993; 93US-00057952.

PR 04-FEB-1994; 94US-00191708.

XX (GENO) GEN HOSPITAL CORP.

PI Seed B;

DR WPI; 2000-586558/55.

DR N-PSDB; AAA50662.

XX CD4-immunoglobulin fusion proteins, useful for targeting gp120 of HIV or
PT SIV.

XX Example 1; Col 41-50; 39pp; English.

XX The present sequence is that of fusion protein CD4Mmu comprising the
CC extracellular portion of CD4, which binds to HIV gp120, linked at its C-
CC terminus to the human IgM heavy chain. To obtain the fusion protein, DNA
CC encoding CD4 was linked to IgM DNA at the Met2 site upstream of the CH1
CC region (see AAA50662). Fusion protein CD4Mmu and a nucleic acid encoding
CC it are claimed. Also claimed are a vector comprising the nucleic acid,
CC and a method of producing the fusion protein in secreted form using a
CC transformed host cell. The fusion protein may further comprise a
CC therapeutic agent, radiolabel or NMR imaging agent. The fusion protein
CC can be administered to an animal (including humans) for treatment of HIV
CC and SIV infection, and can also be used in assays for HIV or SIV, imaging
CC and tissue stains. IgM fusion proteins such as CD4Mmu provide complement-
CC mediated immunity

SQ Sequence 416 AA;

Query Match 59.3%; Score 2024; DB 3; Length 416;
Best Local Similarity 96.8%; Pred. No. 1e-102;
Matches 396; Conservative 2; Mismatches 9; Indels 2; Gaps 1;

```

QY 1 MNRGVFRRHLVLVQLALLPAATQGNKVVLGKKGDVTELTCTASQKKSIOFHKNSNOIK 60
DB 1 MNRGVFRRHLVLVQLALLPAATQGNKVVLGKKGDVTELTCTASQKKSIOFHKNSNOIK 60
QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDDTHLLOGOSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDDTHLLOGOSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIYVYKKEGQVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIYVYKKEGQVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPQALPOVAGSGLTLTA 300
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPQALPOVAGSGLTLTA 300
QY 301 LEAKTGKLEHOENVLVMPRATQLOKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPVVW 360
DB 301 LEAKTGKLEHOENVLVMPRATQLOKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPVVW 360
QY 361 LNPEAGMOCCLSDSGVLLSNIKVLPWTWSTPV--EPKSDCKTHTCP 407
DB 361 LNPEAGMOCCLSDSGVLLSNIKVLPWTWSTPVADPAGSASAPTLTP 409

```

RESULT 60

AAV88329 standard; protein; 458 AA.

14-JUL-2000 (first entry)

XX

DE T4 glycoprotein amino acid sequence.
 XX sT4; glycoprotein; human immunodeficiency virus; HIV; block binding;
 KW AIDS; treatment; inhibit; cell to cell spread; infection; fusion.
 XX
 OS Mammalia.
 XX
 PN US5126433-A.
 XX
 XX 30-JUN-1992.
 PD
 XX 23-OCT-1987; 87US-00114244.
 XX
 PF 21-AUG-1986; 86US-00898587.
 XX
 PR (UNCO) UNIV COLUMBIA NEW YORK.
 XX
 PA Maddon PJ, Chess L, Axel R, Weiss R, Littman DR, McDougal JS;
 XX
 PI WPI; 2000-348913/30.
 XX
 DR Soluble T4 glycoprotein useful for prevention and treatment of acquired
 XX immunodeficiency syndrome and for screening inhibitors of human
 PT immunodeficiency viral binding.
 XX
 PS Example; Fig 6; 64pp; English.
 XX
 XX This sequence represents the amino acid sequence of glycosylated sT4
 CC glycoprotein. Human immunodeficiency virus (HIV) uses sT4 as a target
 CC receptor on T cells. The invention relates to glycosylated sT4 which
 CC functions by blocking the binding of HIV to T4 target cells, and can be
 CC used for the prophylaxis and treatment of AIDS patients. Administration
 CC of sT4 effectively inhibits the cell to cell spreading of HIV infection
 CC and also the fusion of HIV-infected T4 cells and non-infected T4 cells.
 CC The administration of T4 alleviates several symptoms associated with
 CC AIDS, and prevents the occurrence of new pathological changes. The sT4
 CC glycoprotein is useful for the prophylaxis and treatment of patients with
 CC AIDS. It is also useful as a reagent to identify natural, synthetic or
 CC recombinant molecules which act as therapeutic agents or inhibitors of
 CC T4+ cell interactions and in diagnostic assays for detection T4 proteins
 CC or molecules
 XX
 SQ Sequence 458 AA;
 Query Match 59.3%; Score 2024; DB 3; Length 458;
 Best Local Similarity 99.2%; Pred. No. 1.1e-102;
 Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

DB 361 LNPEAGMOCILSDSGVLLSNIKVLPWTSTPVP 396
 |||
 RESULT 61
 ID AAB81502 standard; protein; 458 AA.
 AC AAB81502;
 XX 18-JUN-2001 (first entry)
 DT
 XX Human CD4 protein.
 DE
 XX Human; CD4; CD4 fusion protein; oligomerization;
 KW receptor-ligand interaction inhibition; surface plasmon resonance; SPR;
 KW T cell receptor binding; MHC binding; carcinoma; autoimmune disease;
 KW multiple sclerosis; human immunodeficiency virus; HIV; diabetes;
 KW rheumatoid arthritis; immune disorder.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..25
 FT Protein /label= signal_peptide
 FT /label= Human_CD4
 XX
 PN W0200122084-A2.
 XX
 XX 29-MAR-2001.
 PD
 XX 18-SEP-2000; 2000MO-GB003579.
 XX
 PF 21-SEP-1999; 99GB-00022352.
 XX
 PR (AVID-) AVIDEX LTD.
 XX
 PA Jakobsen BK;
 PI WPI; 2001-273470/28.
 XX
 DR N-PSDB; AAF82582.
 XX
 PT Sequential screening of candidate compounds library for those which
 PT inhibit binding of low affinity receptor-ligand interaction having fast
 PT binding kinetics, using interfacial optical assay.
 XX
 PS Disclosure; Fig 13; 91pp; English.
 XX
 XX The present sequence is human CD4. Human CD4 extracellular domains 1 and
 CC 2 were used in the construction of CD4 oligomerization fusion proteins.
 CC The fusion proteins contain an oligomerization domain that enables the
 CC proteins to bind to one another to form oligomers. The oligomers may be
 CC used in an invention relating to a method for screening for compounds
 CC with the ability to inhibit a low affinity receptor-ligand interaction.
 CC The method uses an interfacial optical assay, such as surface plasmon
 CC resonance (SPR). The method is useful for screening candidate compounds
 CC for the ability to inhibit interaction between MHC/peptide complex and T
 CC cell receptor, and MHC/peptide complex and CD8 or CD4 co-receptor. The
 CC compounds identified by the above methods which interfere with T cell
 CC receptor binding to a particular HLA type molecule are useful as immune
 CC inhibitors for treating carcinomas, autoimmune diseases such as multiple
 CC sclerosis, human immunodeficiency virus (HIV) infection, rheumatoid
 CC arthritis, Hashimoto's disease, insulin dependent diabetes, Good
 CC pasture's syndrome, uveitis, psoriasis and graft rejection
 XX
 SQ Sequence 458 AA;
 Query Match 59.3%; Score 2024; DB 4; Length 458;
 Best Local Similarity 99.2%; Pred. No. 1.1e-102;
 Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

[illegible]

immunoglobulin hinge region polypeptide, an immunoglobulin heavy chain CH2 constant region polypeptide that is fused to the hinge region polypeptide, and an immunoglobulin heavy chain CH3 constant region polypeptide that is fused to the CH2 constant region polypeptide. The hinge region polypeptide comprises: a wild-type human IgG1 immunoglobulin hinge region polypeptide; a mutated human IgG1 immunoglobulin hinge region polypeptide, derived from (a) having 3 or more cysteine residues; where the mutated human IgG1 immunoglobulin hinge region polypeptide contains 2 cysteine residues, where the first cysteine is not mutated; a mutated human IgG1 immunoglobulin hinge region polypeptide, derived from (a) having 3 or more cysteine residues, where the mutated human IgG1 immunoglobulin hinge region polypeptide contains no more than one cysteine residue; and a mutated human IgG1 immunoglobulin hinge region polypeptide, derived from (a) having 3 or more cysteine residues; where the mutated human IgG1 immunoglobulin hinge region polypeptide contains no cysteine residues. The binding domain-immunoglobulin fusion protein is capable of at least one immunological activity comprising antibody dependent cell-mediated cytotoxicity (ADCC) and complement fixation. The binding domain polypeptide is capable of specifically binding to an antigen. Also included are an isolated polynucleotide encoding the binding domain-immunoglobulin fusion protein, a recombinant expression construct comprising the polynucleotide (operably linked to a promoter), a host cell transformed or transfected with a recombinant expression construct, producing the binding domain-immunoglobulin fusion protein, a pharmaceutical composition comprising the binding domain-immunoglobulin fusion protein or polynucleotide and a carrier, and treating a subject having or suspected of having a malignant condition or a B-cell disorder. The binding domain-immunoglobulin fusion protein is useful for treating a subject having or suspected of having a malignant condition or a B-cell disorder, e.g. melanoma, carcinoma or sarcoma, rheumatoid arthritis, myelodysplasia, leukemia, lymphoma, multiple myeloma, myelodysplastic syndrome, myelofibrosis, myelodysplastic disease, type I diabetes mellitus, multiple sclerosis or autoimmune diseases. The present sequence is a binding domain-immunoglobulin fusion protein-associated protein sequence. Note: The sequence data for this patent formed part of the printed specification and is also available in electronic format directly from USPTO at www.uspto.gov/sequence.html?DocID=20030118592. The authors have not identified the sequences in the printed specification by their SEQ ID number therefore none of the sequences can be explicitly identified.

XX Sequence 458 AA;
SQ

Query Match Score 2024: DB 7: Length 458:

Best Local Similarity 99.2%; Pred. No. 1.1e-102;
Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0

0Y 1 MNRGVPFRHLILVLQALLPATOGNNKVLGCKGDTVEITCTASOKKSIQFIHKNSNOIK 60

Db
1 MNRGVPFRHLILVLOALLPAAOGKKVVLGGKGYEILTCTASOKKSIQEFHWKNSNOIK 60

61 ILGNQSFLLYGP SKLNDRADSRSLMDQGFPLIKULKIEDSDTYICEVEDOKEEVOL 120

Db
61 ILGNQGSFLTYKGPSKLNDRADSRSLMDQGNFPLIRKALKIEDSTYICEVEDOKEEVL 120

QY 121 LVFGITANSPTHLLOGOSLTITLESPGSSPSVQCRSPRGKNIOGKTLVSQLELODSG 180

Db 121 LVFGITANSDFTHLLOGQSLLTLESPPGSSSSVQCRSPGKNIOGKTLVSQLELODSG 180

QY 181 TWCTVLONOKVEFKIDIVLAFOKASSIYKKEGEVFFSFLAFTVEKLTGSGELMW 240

Db
181 TWICTVLONQKVEFKIDIVLAFQAKASSIYYKKEGEVFFSFLAFTVEKLTGSGELMW 240

QY 241 QABRASSKSWITFDLKNKEVSVEKVTODPKLOMGKLLPHLTLPEALPOYAGSGNLTIA 300

Db 241 QAERASSSKSMITFDLKNKEVSVKRVTDPPKIQMGKPLPLHLTLPQALPQVAGSGNLTLA 300

301 LEATGKLDHENVLVNRPATOLQNLTCFVWGPTSPKMLSLKENKEAKVSKREKPVW 360

Db 301 LEATGKLTHEVNLVMPATOLQNLTCFVGPTSPKMLSLKLENKEAKSKREKAVW 360

QY 361 LNPEAGMMQCLISDSGOVLESNIKVLPTWSTPVER 396

```
Db      361 LNPEAGMOCCLSDSGQVLESNIKVLPTWTSTPVQP 396
```

RESULT 63
ADE57489
ID ADE57489 standard; protein; 458 AA.
XX
AC ADE57489;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human Protein P01730, SEQ ID NO 3351.
XX
KW Human; pain; neuronal tissue; gene therapy;
KW spinal segmental nerve injury; chronic constriction injury; CCI;
KW spared nerve injury; SN1; Chung.
XX
OS Homo sapiens.
XX
PN MO2003016475-A2.
XX
PD 27-FEB-2003.
XX
PF 14-AUG-2002; 2002MO-US025765.
XX
PR 14-AUG-2001; 2001US-0312147P.
PR 01-NOV-2001; 2001US-0346382P.
PR 26-NOV-2001; 2001US-0333347P.
XX
PA (GENO) GEN HOSPITAL CORP.
PA (FARB) BAYER AG.
XX
P1 Woolf C, D'Urso D, Befort K, Costigan M;
XX
DR MPI; 2003-268312/26.
DR GENBANK; P01730.
XX
PT New composition comprising two or more isolated polypeptides, useful for
PT preparing a medicament for treating pain in an animal.
XX
PS Claim 1; Page: 1017pp; English.
XX
XX The invention discloses a composition comprising two or more isolated rat
CC or human polynucleotides or a polynucleotide which represents a fragment,
CC derivative or allelic variation of the nucleic acid sequence. Also
CC claimed are a vector comprising the novel polynucleotide, a host cell
CC comprising the vector, a method for identifying a nucleotide sequence
CC which is differentially regulated in an animal subjected to pain and a
CC kit to perform the method, an array, a method for identifying an agent
CC that increases or decreases the expression of the polynucleotide sequence
CC that is differentially expressed in neuronal tissue of a first animal
CC subjected to pain, a method for identifying a compound which regulates
CC the expression of a polynucleotide sequence which is differentially
CC expressed in an animal subjected to pain, a method for identifying a
CC compound that regulates the activity of one or more of the
CC polynucleotides, a method for producing a pharmaceutical composition, a
CC method for identifying a compound or small molecule that regulates the
CC activity in an animal of one or more of the polypeptides given in the
CC specification, a method for identifying a compound useful in treating
CC pain and a pharmaceutical composition comprising the one or more
CC polypeptides or their antibodies. The polynucleotide or the compound that
CC modulates its activity is useful for preparing a medicament for treating
CC pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC injury (CCI) and spared nerve injury (SN1) in an animal (e.g. gene
CC therapy). The sequence presented is a human protein (shown in Table 2 of
CC the specification) which is differentially expressed during pain. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic form directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 458 AA;

Query Match 59.3%; Score 2024; DB 7; Length 458;
Best Local Similarity 99.2%; Pred. No. 1.1e-102;
Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 MNRGVPRHLLLVLTALLPAATQGNKRVLGKKGDIVELTCTASQKKSIGFMWKNNSNQIK 60
DB 1 MNRGVPRHLLLVLTALLPAATQGNKRVLGKKGDIVELTCTASQKKSIGFMWKNNSNQIK 60
QY 61 ILGNQGSFLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEGSDTYICEVEDQKEVQL 120
DB 61 ILGNQGSFLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEGSDTYICEVEDQKEVQL 120
QY 121 LVFGLTANSDTHLLQGOSLTLTLESPPGSSPSVQCRSPRGNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLLQGOSLTLTLESPPGSSPSVQCRSPRGNIQGGKTLVSQLELDQSG 180
QY 181 TWCTVLTQNKQVEFKIDIVLAFQKASSIVYKXGQGVFPSPPLATVEKLTGSGELMW 240
DB 181 TWCTVLTQNKQVEFKIDIVLAFQKASSIVYKXGQGVFPSPPLATVEKLTGSGELMW 240
QY 241 QAERASSKSWITFDLKNKESVSKRYTQDPRLQMGKLPHLTLPQALPOYAGSGNLTLA 300
DB 241 QAERASSKSWITFDLKNKESVSKRYTQDPRLQMGKLPHLTLPQALPOYAGSGNLTLA 300
QY 301 LEAKTGKLEHENVLVVWRATQLOKNTLCEVWGPTSPKLMSTLKLENKAKVSKKEPVMV 360
DB 301 LEAKTGKLEHENVLVVWRATQLOKNTLCEVWGPTSPKLMSTLKLENKAKVSKKEPVMV 360
QY 361 LNPEAGMWQCLLSDSGVLLLESNIKVLPTWSTPYEP 396
DB 361 LNPEAGMWQCLLSDSGVLLLESNIKVLPTWSTPYEP 396

RESULT 64
ADA44807
ID ADA44807 standard; protein; 473 AA.
XX
AC ADA44807;
XX
DT 04-DEC-2003 (first entry)
XX
DE CD4/TCR CD3epsilon chain chimeric protein CD4epsilon1on15, SEQ ID NO:2.
XX
KW HIV-1 infection; human immunodeficiency virus-1; CD4+ cell; chimeric CD4;
KW endoplasmic reticulum; ER retention; envelope protein gp160;
KW T cell receptor CD3epsilon chain; C-terminal domain; CD4epsilon1on15;
KW gene therapy; human; receptor.
OS Chimeric.
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Protein 1..458
FT /label= CD4
FT 459..473
FT Region /note= "Part of the C-terminal domain of the T cell
FT receptor CD3epsilon chain"
FT
XX
PN MO2003076468-A1.
XX
PD 18-SEP-2003.
XX
PP 14-MAR-2003; 2003MO-BE000120.
XX
PR 14-MAR-2002; 2002ES-00000616.
XX
PA (CNSJ) CONSEJO SUPERIOR INVESTIGACIONES CIENTIF.
XX
PI Alarcon Sanchez BJ, San Jose Martinez ME, Zaldivar Nocardio I;
XX Gomez Buendia M;
XX
DR MPI; 2003-779059/73.
DR N-PSDB; ADA44806.
XX
PT Composition for treating or preventing human immune deficiency virus,
PT comprises CD4 chimeric protein having a protective effect in trans, or

PT related nucleic acid.
XX
PS Claim 5; Page 33-35; 43pp; Spanish.
XX
CC The invention relates to a composition for the treatment or prevention of
CC human immunodeficiency virus-1 (HIV-1) infection. The composition
CC comprises CD4+ cells that have been transduced with a vector that encodes
CC a chimeric CD4 molecule which is capable of being retained in the
CC endoplasmic reticulum (ER). The invention also encompasses the use of a
CC soluble protein factor produced by CD4+ cells that have been transduced
CC with a vector encoding a chimeric CD4 protein; and the use of an
CC expression system encoding a chimeric CD4 protein. The ER-localised
CC chimeric CD4 molecule binds to the HIV-1 envelope protein gp160,
CC resulting in HIV-1 retention in the ER and thereby preventing viral
CC replication. In a specific embodiment, the chimeric CD4 molecule
CC comprises CD4 fused to 15 amino acids of the C-terminal domain of the T
CC cell receptor CD3epsilon chain; this chimeric CD4 molecule is designated
CC CD4epsilon15 (ADA44807). A known chimeric CD4 of similar structure but
CC containing only 10 amino acids from CD3epsilon can also be used.
CC Compositions of the invention have an in trans effect on the replication
CC of HIV-1, and may be used to treat and prevent HIV-1 infection. The
CC present sequence represents the chimeric CD4 molecule CD4epsilon15, which
CC is specifically claimed for use in compositions of the invention.
XX
SQ Sequence 473 AA;
Query Match 59.3%; Score 2024; DB 7; Length 473;
Best Local Similarity 99.2%; Pred. No. 1.2e-102;
Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
QY 1 NMRGVPFRLHLVQLALPPATQGNKVVLLGKKGDTVELTCTASQKSIQFHMKNNSQIK 60
DB 1 NMRGVPFRLHLVQLALPPATQGNKVVLLGKKGDTVELTCTASQKSIQFHMKNNSQIK 60
QY 61 ILNGGSPFLTKGSPSLANDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILNGGSPFLTKGSPSLANDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEYQL 120
QY 61 ILNGGSPFLTKGSPSLANDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILNGGSPFLTKGSPSLANDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDFHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDFHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 121 LVFGLTANSDFHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDFHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLONQKVEKIDIVVLAFOKASSIYKKEGEVEVSFPLAFVVEKLTGSGELMW 240
DB 181 TWTCTVLONQKVEKIDIVVLAFOKASSIYKKEGEVEVSFPLAFVVEKLTGSGELMW 240
QY 241 QAEARASSSKSWITFDLKNKEVSVKRVTPDPLQMGKPLPLHLTLPQALPQYAGSGLTLA 300
DB 241 QAEARASSSKSWITFDLKNKEVSVKRVTPDPLQMGKPLPLHLTLPQALPQYAGSGLTLA 300
QY 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVW 360
DB 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVW 360
QY 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVW 360
DB 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVW 360
QY 361 LNPEAGMWOCILSDSGOVLLESNIKVLPTWSTPVP 396
DB 361 LNPEAGMWOCILSDSGOVLLESNIKVLPTWSTPVP 396
RESULT 65
AAR20152
ID AAR20152 standard; protein; 519 AA.
XX
XX AAR20152;
AC
XX
DT 25-MAR-2003 (revised)
DT 31-MAR-1992 (first entry)
XX
DE Human CD4 sequence encoded by PATY. 6.
XX
KW Human immunodeficiency virus; HIV; gp 120; AIDS; ARC; glycoprotein;
KW acquired immune deficiency syndrome; AIDS related complex;
T helper lymphocytes.

XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Peptide 1..25
FT /label= signal_sequence
XX
PN MO9118618-A.
XX
PD 12-DEC-1991.
XX
XX 25-MAY-1990; 90US-00529186.
XX
PF 25-MAY-1990; 90US-00529186.
XX
PR 25-MAY-1990; 90US-00529186.
XX
PA (BIOJ) BIOGEN INC.
XX
PI Fisher RA, Hession C, Burdly LC;
XX
DR WPI, 1992-007200/01.
DR N-PSDB; AAQ20327.
XX
PT New immuno-therapeutic human CD4 variants and derivs. - elicit AB
PT production to HIV gp.120, useful in treating, preventing and diagnosing
PT AIDS, ARC and HIV infections.
XX
PS Disclosure; Fig 28; 179pp; English.
XX
CC The sequence was deduced from the DNA sequence of subclone PATY.6, contg.
CC DNA coding for the full-length human CD4. The clone was constructed from
CC plasmids PBG178A and PBG3178 (both in US8602940). The DNA can be used to
CC express recombinant CD4 and analogues for use in diagnosis and treatment
CC of diseases caused by infective agents whose primary targets are T4+
CC lymphocytes. See also AAR20148-R20155 and AAR21078. (Updated on 25-MAR-
CC 2003 to correct PA field.)
XX
SQ Sequence 519 AA;
Query Match 59.3%; Score 2024; DB 2; Length 519;
Best Local Similarity 99.2%; Pred. No. 1.3e-102;
Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
QY 1 NMRGVPFRLHLVQLALPPATQGNKVVLLGKKGDTVELTCTASQKSIQFHMKNNSQIK 60
DB 62 NMRGVPFRLHLVQLALPPATQGNKVVLLGKKGDTVELTCTASQKSIQFHMKNNSQIK 121
QY 61 ILNGGSPFLTKGSPSLANDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEYQL 120
DB 122 ILNGGSPFLTKGSPSLANDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEYQL 181
QY 121 LVFGLTANSDFHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDFHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLONQKVEKIDIVVLAFOKASSIYKKEGEVEVSFPLAFVVEKLTGSGELMW 240
DB 182 LVFGLTANSDFHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 241
QY 242 TWTCTVLONQKVEKIDIVVLAFOKASSIYKKEGEVEVSFPLAFVVEKLTGSGELMW 301
DB 242 TWTCTVLONQKVEKIDIVVLAFOKASSIYKKEGEVEVSFPLAFVVEKLTGSGELMW 301
QY 241 QAEARASSSKSWITFDLKNKEVSVKRVTPDPLQMGKPLPLHLTLPQALPQYAGSGLTLA 300
DB 302 QAEARASSSKSWITFDLKNKEVSVKRVTPDPLQMGKPLPLHLTLPQALPQYAGSGLTLA 361
QY 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVW 360
DB 362 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVW 421
QY 361 LNPEAGMWOCILSDSGOVLLESNIKVLPTWSTPVP 396
DB 422 LNPEAGMWOCILSDSGOVLLESNIKVLPTWSTPVP 457
RESULT 66
AAR13491

ID	AA013491	standard; protein; 458 AA.
AC	AA013491;	
XX		
XX	25-MAR-2003	(revised)
DT	30-OCT-1991	(first entry)
XX		
DE	Human CD4 encoded by pJOD.sCD4.Y187.Shabl and p170.2.	
XX		
XX	C4bp; gp120; HIV; T Lymphocyte; fusion protein.	
OS	Homo sapiens.	
XX		
XX	Key	Location/Qualifiers
FT	Peptide	1..25
FT		/label= signal_peptide
FT	Domain	26..132
FT		/label= Ig-related
FT		/note= "extracellular"
FT	Disulfide-bond	41..109
FT	Domain	133..202
FT		/label= Ig-related
FT		/note= "extracellular"
FT	Disulfide-bond	155..184
FT	Domain	203..318
FT		/label= Ig-related
FT		/note= "extracellular"
FT	Domain	319..395
FT		/label= Ig-related
FT		/note= "extracellular"
FT	Disulfide-bond	328..370
FT	Region	396..416
FT		/label= transmembrane
FT	Domain	417..456
FT		/label= cytoplasmic
XX		
XX	WO9111461-A.	
PN		
PD	08-AUG-1991.	
XX		
XX	26-JAN-1990;	90US-00470888.
PP		
PR	26-JAN-1990;	90US-00470888.
XX		
PA	(BIOJ) BIOGEN INC.	
XX		
PI	Pasek MP, Winkler G, Liu TR;	
XX		
DR	WPI; 1991-252613/34.	
DR	N-PSDB; AAQ13243.	
XX		
PT	New C4 binding protein fusion proteins and DNA encoding them - comprise	
PT	assemblies of C4bp monomers linked to functional moiety, e.g. AZT, useful	
PT	as delivery vehicles in diagnosis and therapy.	
XX		
PS	Example 3; Fig 3; 105pp; English.	
XX		
CC	This is the preferred CD4 sequence for use in the construction of fusion	
CC	proteins with C4-binding protein. Truncated, soluble versions of CD4 can	
CC	also be used. The C4bp-CD4 fusion protein may be useful to target AZT or	
CC	similar anti-retroviral agent to HIV-infected cells. See AAQ13242-51.	
CC	(Updated on 25-MAR-2003 to correct PA field.)	
XX		
XX	Sequence 458 AA;	
XX		

Qy	6	IIIGNOSFLTKBPSKLNRAISRRLMOQGNPLIKLKIKEDSDYICEVEDOKKEVOL	120
Dp	61	ILGNOSFLTKBPSKLNRAISRRLMOQGNPLIKLKIKEDSDYICEVEDOKKEVOL	120
Qy	121	LYEGLTANSDTHLLOQGSITLTLESPPGSSPSVOCRSPRGKNIIGGKTLISVSOLEIDSG	180
Dp	121	LYEGLTANSDTHLLOQGSITLTLESPPGSSPSVOCRSPRGKNIIGGKTLISVSOLEIDSG	180
Qy	181	TMFCTYLOKQKVEFPIDIVYAPFKASSIYYKKGEQVEVSPFLATVETLTGSGELM	240
Dp	181	TMFCTYLOKQKVEFKIDIVYAPFKASSIYYKKGEQVEVSPFLATVETLTGSGELM	240
Qy	241	QAEKASSSKSWITTFDIKNKEVSVKRVTDPKYLOQKPKLPLHTLPLQALPOYAGSGNITLA	300
Dp	241	QAEKASSSKSWITTFDIKNKEVSVKRVTDPKYLOQKPKLPLHTLPLQALPOYAGSGNITLA	300
Qy	301	LEAKTQKLEQEVNLYVMRATOLQKLTGEWGPSPKLMSTKLKENEAKVSKREKVVW	360
Dp	301	LEAKTQKLEQEVNLYVMRATOLQKLTGEWGPSPKLMSTKLKENEAKVSKREKVVW	360
Qy	361	LNPEAGMOCCLSDSGOVLLESNITKVLPTWSTPVEP	396
Dp	361	LNPEAGMOCCLSDSGOVLLESNITKVLPTWSTPVEP	396

	RESULT 67
XX	AAP93506
ID	AAP93506 standard; protein, 394 AA.
XX AC	
XX	AAP93506;
DT	25-MAR-2003 (revised)
DT	02-JUN-1990 (first entry)
DE	Derived sequence of soluble T4 lymphocyte surface protein (ST4) .
KW	Soluble T4 lymphocyte surface protein; ST4; AIDS therapy; AIDS diagnosis
XX OS	
XX	Homo sapiens.
Key	Location/Qualifiers
FH Protein	26..394
Misc-difference	26..26
/note= "When sequence was determined by amino acid sequencing, this residue was Lys."	
FT Region	27..45 /note= "these residues are identical to those determined by amino acid sequencing"
FN EP13377-A.	
PD 26-APR-1989.	
PF 21-OCT-1988; 88EP-00309907.	
PR 23-OCT-1987; 87US-00112800.	
PA (SMIK) SMITHKLINE BECKMAN CORP. PA (SMIK) SMITHKLINE BEECHAM CORP.	
XI Deen KC, Polenawass GM, Inacker RH, Sweet RW; WI: 1989-124209/17. DR N-PSTD; AAN90763.	
PT Purifying soluble recombinant T4 lymphocyte surface protein - from cell culture by adsorption on cation exchanger, elution and treatment with anion exchanger.	
PS Disclosure; Fig 1; 13pp; English.	
The coding sequence is derived from the published sequence of ST4. ST4 is useful in the prevention and treatment of AIDS by inhibiting spread of	

CC the virus. It can also be used as an inhibitor of T4+ cell function, as a
 CC reagent for identifying inhibitors of T4+ cell interaction and to produce
 CC diagnostic monoclonal antibodies. (Updated on 25-MAR-2003 to correct PA
 CC field.) (Updated on 25-MAR-2003 to correct PI field.)

XX Sequence 394 AA;

Query Match 59.1%; Score 2018; DB 1; Length 394;
 Best Local Similarity 99.5%; Pred. No. 2e-102;
 Matches 392; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

QY 1 NMRGVFPHLLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHWKNSNQIK 60
   |||||
DB 1 NMRGVFPHLLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHWKNSNQIK 60
QY 61 ILGNOSFLLTKGSPKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEYQL 120
   |||||
DB 61 ILGNOSFLLTKGSPKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDTHLLOGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
   |||||
DB 121 LVFGLTANSDTHLLOGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFTVEKLTGSGELMW 240
   |||||
DB 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFTVEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLOMGKKLPLHLTLPOALPOYAGSGLTLTA 300
   |||||
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLOMGKKLPLHLTLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKLEHDEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYMV 360
   |||||
DB 301 LEAKTGKLEHDEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYMV 360
QY 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPV 394
   |||||
DB 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPV 394

```

RESULT 68

AA91922 standard; protein; 402 AA.

```

XX ID AA91922 standard; protein; 402 AA.
XX AC AAP91922;
XX DT 25-MAR-2003 (revised)
XX DT 31-OCT-2002 (revised)
XX DT 14-MAY-1990 (first entry)
XX DE Sequence of a secreted form of the CD4 adhesion (CD4T) polypeptide.
XX KW CD4 variants; CD4T; gp120; plasmid PRKCD4; HIV-1; HTLV-IIIB.
XX OS Homo sapiens.
XX XX
XX Key Location/Qualifiers
XX FT Misc-difference 25..26 /note= "signal processing site"
XX FT Misc-difference 366 /note= "other forms of CD4T terminate here"
XX FT Misc-difference 368 /note= "other forms of CD4T terminate here"
XX PN EPJ14317-A.
XX PD 03-MAY-1989.
XX PF 03-OCT-1988; 88EP-00309194.
XX PR 02-OCT-1987; 87US-00104329.
XX PR 28-SEP-1988; 88US-00250785.
XX XX

```

PA (GERTH) GENENTECH INC.

XX Capon DJ, Gregory TJ;

XX WPI; 1989-131855/18.

XX N-PSDB; AAN90777.

XX Compens. concg. adhesion variants - useful in therapy and diagnostics,
 PT e.g. CD4 variants which are therapeutically useful for treating human
 PT immuno-deficiency virus.

PS Disclosure; Fig 1a-1c; 36pp; English.

CC It may be capable of binding gp120. It may be fused with an
 CC immunoglobulin constant domain, human transferrin, apolipoprotein,
 CC albumin, ricin A chain or diphtheria toxin A. It may be used for
 CC antiviral of immunomodulatory therapy particularly in treatment of HIV
 CC infection. It may have variants by insertion, substitution of deletion in
 CC non-functional regions. (Updated on 31-OCT-2002 to add missing OS field.)
 CC (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to
 CC correct PI field.)

XX Sequence 402 AA;

Query Match 59.1%; Score 2017; DB 1; Length 402;
 Best Local Similarity 99.7%; Pred. No. 2.4e-102;
 Matches 392; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

QY 1 NMRGVFPHLLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHWKNSNQIK 60
   |||||
DB 1 NMRGVFPHLLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHWKNSNQIK 60
QY 61 ILGNOSFLLTKGSPKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEYQL 120
   |||||
DB 61 ILGNOSFLLTKGSPKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDTHLLOGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
   |||||
DB 121 LVFGLTANSDTHLLOGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFTVEKLTGSGELMW 240
   |||||
DB 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFTVEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLOMGKKLPLHLTLPOALPOYAGSGLTLTA 300
   |||||
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLOMGKKLPLHLTLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKLEHDEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYMV 360
   |||||
DB 301 LEAKTGKLEHDEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYMV 360
QY 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPV 393
   |||||
DB 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPV 393

```

RESULT 69

AA94757 standard; protein; 402 AA.

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XX ID AA94757 standard; protein; 402 AA.
XX AC AAP94757;
XX DT 25-MAR-2003 (revised)
XX DT 03-OCT-2002 (revised)
XX DT 28-JAN-1991 (first entry)
XX DE Sequence of a secreted form of the CD4 adhesion.
XX KW HIV; antiviral; therapy; diagnosis.
XX OS Homo sapiens.
XX XX

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FH Key Location/Qualifiers
FT Peptide 1..25
FT /note= "signal"
FT Protein 26..402
XX
XX MO8902922-A.
XX
XX 06-APR-1989.
XX
XX 03-OCT-1988; 88MO-US003414.
XX
XX 02-OCT-1987; 87US-00104329.
XX
XX 28-SEP-1988; 88US-00250785.
XX
XX (GETH ) GENENTECH INC.
XX
XX Capon DJ, Gregory TU;
XX
XX WPI; 1989-114397/15.
XX
XX N-PSDB; AAN90734.
XX
XX New nucleic acid sequences encoding adhesion, esp. CD 4, variants -
XX
XX partic. with trans-membrane domain inactivated or fused to other peptide,
XX
XX useful esp. for treating HIV infections.
XX
XX Disclosure; Fig 1a-1c; 78pp; English.
XX
XX The patent claims a nucleic acid encoding an aa sequence variant of an
XX
XX adhesion, which is pref. a CD4 polypeptide variant modified such that its
XX
XX transmembrane domain has been inactivated, either deleted or replaced by
XX
XX a sequence of hydrophilic hydrophathy profile. The aa sequence variant of
XX
XX an adhesion may also be a fusion of CD4 with a 2nd polypeptide esp. one
XX
XX conqg. a non-CD4 epitope; a signal sequence; a cpd. able to elicit a
XX
XX humoral immune response (viral polypeptide or allergen); or a human
XX
XX plasma protein of long plasma half-life. CD4 fusion proteins can have
XX
XX antiviral and immunomodulatory activity and are esp. useful for treating
XX
XX HIV infections regardless of genetic variation within the virus. They and
XX
XX antibodies raised against them can also be used diagnostically for
XX
XX assaying adhesions and their ligands. (Updated on 03-OCT-2002 to add
XX
XX missing OS field.) (Updated on 25-MAR-2003 to correct PR field.) (Updated
XX
XX on 25-MAR-2003 to correct PA field.)
XX
XX Sequence 402 AA;
SQ
Query Match 59.1%; Score 2017; DB 1; Length 402;
Best Local Similarity 99.7%; Pred. No. 2.4e-102;
Matches 392; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGDVETLCTASQKSIQFHMKNNSQIK 60
DB 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGDVETLCTASQKSIQFHMKNNSQIK 60
OY 1 ILNGSGFLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEVQL 120
DB 61 ILNGSGFLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEVQL 120
OY 121 LVFGLTANSDTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
DB 121 LVFGLTANSDTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
OY 181 TWTCVTLQONQKVEFKIDIVLAFQKASSIVYKKEGVEFSFPLATVEKLTGSGELMW 240
DB 181 TWTCVTLQONQKVEFKIDIVLAFQKASSIVYKKEGVEFSFPLATVEKLTGSGELMW 240
OY 181 TWTCVTLQONQKVEFKIDIVLAFQKASSIVYKKEGVEFSFPLATVEKLTGSGELMW 240
DB 181 TWTCVTLQONQKVEFKIDIVLAFQKASSIVYKKEGVEFSFPLATVEKLTGSGELMW 240
OY 241 QAERSSSSKSWITTPDLKKEVSVKRVTDPKLQMKKPLPLHLTLFQALPQYAGSNNLTLA 300
DB 241 QAERSSSSKSWITTPDLKKEVSVKRVTDPKLQMKKPLPLHLTLFQALPQYAGSNNLTLA 300
OY 301 LEAKTGKLAHQEVNLYVMRATOLQKLTCEVMGPTSPKLTLSIKLENKAKYSKEKPYVW 360
DB 301 LEAKTGKLAHQEVNLYVMRATOLQKLTCEVMGPTSPKLTLSIKLENKAKYSKEKPYVW 360
OY 361 LNPEAGMOCILSDSGVLLBSNIVKLPWTSTP 393

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DB 361 LNPEAGMOCILSDSGVLLBSNIVKLPWTSTP 393
|||||
RESULT 70
AAG79087
ID AAG79087 standard; protein; 458 AA.
AC AAG79087;
XX
XX 10-DEC-2001 (first entry)
XX
XX Amino acid sequence of human CD4 protein.
XX
XX Human; receptor; DC-SIGN; dendritic cell; T lymphocyte; HIV; gp120;
XX
XX C-type lectin; ICAM3; HIV entry; T cell; macrophage; HIV infection; CD4.
XX
XX Homo sapiens.
XX
XX MO200164752-A2.
XX
XX 07-SEP-2001.
XX
XX 28-FEB-2001; 2001MO-US006322.
XX
XX 02-MAR-2000; 2000US-00517605.
XX
XX (UYNY ) UNIV NEW YORK STATE.
XX
XX (UYNI-) UNIV NIMMGEN.
XX
XX Litman DR, Kwon D, Van Kooyk Y, Geijtenbeek T;
XX
XX WPI; 2001-602565/68.
XX
XX An antibody for the treatment or prevention of HIV-infection comprises a
XX
XX gp120 portion which binds to DC-SIGN or is exposed upon gp120 binding of
XX
XX DC-SIGN due to concomitant conformational change.
XX
XX Disclosure; Page 115-116; 131pp; English.
XX
XX The specification describes an antibody which is specific for an
XX
XX antigenic fragment of gp120. This antigenic fragment binds to DC-SIGN or
XX
XX is exposed upon gp120 binding of DC-SIGN due to concomitant
XX
XX conformational change. DC-SIGN is a receptor that is specifically
XX
XX expressed on dendritic cells and facilitates infection of T lymphocytes
XX
XX with HIV. DC-SIGN is identical to a HIV-1 gp120-binding C-type lectin. DC
XX
XX -SIGN binds ICAM-3 (which is expressed constitutively on T lymphocytes)
XX
XX with high affinity. The antibody of the invention inhibits the trans
XX
XX enhancement of HIV entry into a T cell or macrophage facilitated by
XX
XX dendritic cells. The antibody is useful to treat or prevent HIV
XX
XX infection. The present sequence represents a human CD4 protein
XX
XX Sequence 458 AA;
SQ
Query Match 59.1%; Score 2016; DB 4; Length 458;
Best Local Similarity 99.0%; Pred. No. 3.1e-102;
Matches 392; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
OY 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGDVETLCTASQKSIQFHMKNNSQIK 60
DB 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGDVETLCTASQKSIQFHMKNNSQIK 60
OY 1 ILNGSGFLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEVQL 120
DB 61 ILNGSGFLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEVQL 120
OY 121 LVFGLTANSDTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
DB 121 LVFGLTANSDTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
OY 181 TWTCVTLQONQKVEFKIDIVLAFQKASSIVYKKEGVEFSFPLATVEKLTGSGELMW 240
DB 181 TWTCVTLQONQKVEFKIDIVLAFQKASSIVYKKEGVEFSFPLATVEKLTGSGELMW 240

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QY 241 QAEASSSKSWITFDLKNKEVSVKRVYTOPDKLQMGKKLPLHLTLPOALPOVAGSGLTLTA 300
DB 241 QAEASSSKSWITFDLKNKEVSVKRVYTOPDKLQMGKKLPLHLTLPOALPOVAGSGLTLTA 300
QY 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKENKAQVSKREKPVWV 360
DB 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKENKAQVSKREKPVWV 360
QY 361 LNPEAGMMOCLLSDSGVLLSNIKVLPTWSTPEP 396
DB 361 LNPEAGMMOCLLSDSGVLLSNIKVLPTWSTPEP 396

RESULT 71
AA58328
ID AAY88328 standard; protein; 394 AA.
AC AAY88328;
DT 14-JUL-2000 (first entry)
XX
DE T4 glycoprotein amino acid sequence.
KM sT4; glycoprotein; human immunodeficiency virus; HIV; block binding;
XX AIDS; treatment; inhibit; cell to cell spread; infection; fusion.
OS Mammalia.
XX
XX US5126433-A.
XX
XX 30-JUN-1992.
XX
XX 23-OCT-1987; 87US-00114244.
XX
XX 21-AUG-1986; 86US-00898587.
XX
XX (UYCO ) UNIV COLUMBIA NEW YORK.
XX
XX Madden PJ, Chess L, Axel R, Weiss R, Littman DR, McDougal JS;
XX WPI; 2000-348913/30.
XX DR N-PSDB; AAA10906.
XX
XX Soluble T4 glycoprotein useful for prevention and treatment of acquired
XX immunodeficiency viral binding.
XX
XX Disclosure; Col 11-16; 64pp; English.
XX
XX This sequence represents the full length amino acid sequence of
XX glycosylated sT4 glycoprotein. Human immunodeficiency virus (HIV) uses
XX sT4 as a target receptor on T cells. The invention relates to
XX glycosylated sT4 which functions by blocking the binding of HIV to T4
XX target cells, and can be used for the prophylaxis and treatment of AIDS
XX patients. Administration of sT4 effectively inhibits the cell to cell
XX spreading of HIV infection and also the fusion of HIV-infected T4 cells
XX and non-infected T4 cells. The administration of T4 alleviates several
XX symptoms associated with AIDS, and prevents the occurrence of new
XX pathological changes. The sT4 glycoprotein is useful for the prophylaxis
XX and treatment of patients with AIDS. It is also useful as a reagent to
XX identify natural, synthetic or recombinant molecules which act as
XX CC therapeutic agents or inhibitors of T4+ cell interactions and in
XX CC diagnostic assays for detection T4 proteins or molecules
XX
XX Sequence 394 AA;
SQ

Query Match 59.0%; Score 2015; DB 3; Length 394;
Best Local Similarity 99.5%; Pred No. 3e-102; 2; Indels 0; Gaps 0;
Matches 392; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 NNRGVFRRLLLVQLALLPAATQGNKVVYLGKKGDVVELTCTASQKKSIOFHMKNNSNOIK 60
|||||
```

```
DB 1 NNRGVFRRLLLVQLALLPAATQGNKVVYLGKKGDVVELTCTASQKKSIOFHMKNNSNOIK 60
QY 61 IIGNQSFLTKGSPKLNDRADSRSLMDQGNFPLIIKNLKIEDSPTYICEVDQKEVQL 120
DB 61 IIGNQSFLTKGSPKLNDRADSRSLMDQGNFPLIIKNLKIEDSPTYICEVDQKEVQL 120
QY 121 LVFGLTANSDFHLLQGSITLTLSPGSSPSVQCRSPRGKNIQSGKTLVSQLELODSG 180
DB 121 LVFGLTANSDFHLLQGSITLTLSPGSSPSVQCRSPRGKNIQSGKTLVSQLELODSG 180
QY 181 TWTCTVLONQKVEERKIDIVLAFOKASSIVYKKEGEVSEFPLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLONQKVEERKIDIVLAFOKASSIVYKKEGEVSEFPLAFVTEKLTGSGELMW 240
QY 241 QAEASSSKSWITFDLKNKEVSVKRVYTOPDKLQMGKKLPLHLTLPOALPOVAGSGLTLTA 300
DB 241 QAEASSSKSWITFDLKNKEVSVKRVYTOPDKLQMGKKLPLHLTLPOALPOVAGSGLTLTA 300
QY 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKENKAQVSKREKPVWV 360
DB 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKENKAQVSKREKPVWV 360
QY 361 LNPEAGMMOCLLSDSGVLLSNIKVLPTWSTPEP 394
DB 361 LNPEAGMMOCLLSDSGVLLSNIKVLPTWSTPEP 394

RESULT 72
AA59825
ID AAY39825 standard; protein; 394 AA.
XX
XX AAY39825;
XX
XX 03-DEC-1999 (first entry)
XX
XX Soluble human T4 protein.
XX
XX Soluble T4 protein; sT4; human; HIV; binding inhibitor; T4+ cell; AIDS;
XX KM vaccine; immunisation; therapy.
XX
XX Homo sapiens.
XX
XX US5958678-A.
XX
XX 28-SEP-1999.
XX
XX 12-DEC-1994; 94US-00354452.
XX
XX 21-AUG-1986; 86US-00898587.
XX PR 11-JUN-1991; 91US-00713564.
XX PR 06-JUL-1992; 92US-00909021.
XX
XX (UYCO ) UNIV COLUMBIA NEW YORK.
XX
XX McDougal JS, Weiss R, Axel R, Littman DR, Madden PJ, Chess L;
XX WPI; 1999-561025/47.
XX DR N-PSDB; AA220694.
XX
XX Human T4 protein inhibits HIV binding to T4 cells, useful for treating
XX AIDS.
XX
XX Disclosure; Col 13-16; 58pp; English.
XX
XX This sequence represents the soluble human T4 protein of the invention.
XX The soluble human T4 protein blocks the binding of HIV to T4+ cells and
XX is therefore useful for the treatment of AIDS. Monoclonal antibodies
XX against the T4 protein may be used as vaccines for immunising subjects
XX
XX Sequence 394 AA;
SQ

Query Match 58.9%; Score 2012; DB 2; Length 394;
```

Best Local Similarity 99.2%; Pred. No. 4.3e-102;
Matches 391; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

```

QY 1 MNRGVPFRHLILVQLALPPAATQGNKVVLGKGGDTVELTCTASQKSIQPHMKNNOIK 60
DB 1 MNRGVPFRHLILVQLALPPAATQGNKVVLGKGGDTVELTCTASQKSIQPHMKNNOIK 60
QY 61 ILGNQSFLLTKGSPKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILGNQSFLLTKGSPKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDTHLLQGGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDTHLLQGGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 181 TWTCVTUQONKQKVEFKIDIVVLAFOKASSIVYKKEGQVFPSPPLATVEKLTSGSELVW 240
DB 181 TWTCVTUQONKQKVEFKIDIVVLAFOKASSIVYKKEGQVFPSPPLATVEKLTSGSELVW 240
QY 241 QAERASSSKSMITFDLKNKEVSVKRVTDQPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
DB 241 QAERASSSKSMITFDLKNKEVSVKRVTDQPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
QY 301 LEAKTGKLHQBENVLVVNRATQLOKNLTCEVWGPTSPKLMSTLKENKEAKVSKREKPVW 360
DB 301 LEAKTGKLHQBENVLVVNRATQLOKNLTCEVWGPTSPKLMSTLKENKEAKVSKREKPVW 360
QY 361 LNPEAGMWOCCLSDSGVLLSNIKVLPTWSTPV 394
DB 361 LNPEAGMWOCCLSDSGVLLSNIKVLPTWSTPV 394

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RESULT 73

ADE65841

ID ADE65841 standard; protein; 458 AA.

XX ADE65841;

DT 29-JAN-2004 (first entry)

DE Human CD4 receptor.

XX Human; CD4 receptor; receptor; protein-protein interaction;

KM protein array; PDZ domain; drug target screening.

XX Homo sapiens.

FN US2003170723-A1.

PD 11-SEP-2003.

PF 06-MAR-2002; 2002US-00092138.

PR 06-MAR-2002; 2002US-00092138.

PA (SATO/) SATO T.

PI Sato T;

XX WPI; 2003-852032/79.

PT Preparing a protein array useful for screening drug targets comprising

PT depositing an array of a first protein on substrate, and applying a

PT second protein comprising an amino acid sequence that binds to a domain

PT of the first protein.

PS Disclosure; SEQ ID NO 25; 60pp; English.

XX The invention relates to a method for preparing a protein array based on

CC protein-protein interaction, by depositing an array of a first protein

CC comprising a PDZ domain on a substrate, and applying a second protein

CC comprising an amino acid sequence that binds to the PDZ domain of the

CC first protein. The method is useful for preparing protein arrays based on

CC biochemical protein-protein interactions. Arrays produced by this method
CC are useful for screening drug targets. This sequence represents the human
CC CD4 receptor, used in the method of the invention.

SO Sequence 458 AA;

Query Match 58.8%; Score 2066; DB 7; Length 458;
Best Local Similarity 98.5%; Pred. No. 1.1e-101;
Matches 390; Conservative 2; Mismatches 4; Indels 0; Gaps 0;

```

QY 1 MNRGVPFRHLILVQLALPPAATQGNKVVLGKGGDTVELTCTASQKSIQPHMKNNOIK 60
DB 1 MNRGVPFRHLILVQLALPPAATQGNKVVLGKGGDTVELTCTASQKSIQPHMKNNOIK 60
QY 61 ILGNQSFLLTKGSPKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILGNQSFLLTKGSPKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDTHLLQGGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDTHLLQGGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 181 TWTCVTUQONKQKVEFKIDIVVLAFOKASSIVYKKEGQVFPSPPLATVEKLTSGSELVW 240
DB 181 TWTCVTUQONKQKVEFKIDIVVLAFOKASSIVYKKEGQVFPSPPLATVEKLTSGSELVW 240
QY 241 QAERASSSKSMITFDLKNKEVSVKRVTDQPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
DB 241 QAERASSSKSMITFDLKNKEVSVKRVTDQPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
QY 301 LEAKTGKLHQBENVLVVNRATQLOKNLTCEVWGPTSPKLMSTLKENKEAKVSKREKPVW 360
DB 301 LEAKTGKLHQBENVLVVNRATQLOKNLTCEVWGPTSPKLMSTLKENKEAKVSKREKPVW 360
QY 361 LNPEAGMWOCCLSDSGVLLSNIKVLPTWSTPV 396
DB 361 LNPEAGMWOCCLSDSGVLLSNIKVLPTWSTPV 396

```

RESULT 74

AAR07640

ID AAR07640 standard; protein; 2458 AA.

XX AAR07640;

DT 31-OCT-2002 (revised)

DT 20-DEC-1990 (first entry)

DE Deduced protein sequence of p170-2 comprising T4.

KM plasmid p170-2; soluble T4 protein; AIDS; ARC; HIV.

XX Synthetic.

FH Key Location/Qualifiers

FT Protein 400..858

FT /label= T4 surface glycoprotein

XX MO9008198-A.

XX 26-JUL-1990.

PP 18-JAN-1989; 89US-00300096.

PR 18-JAN-1989; 89US-00300096.

PA (HARD) HARVARD COLLEGE.

PI Letvin NA;

XX WPI; 1990-254040/33.

DR N-PSDB; AAQ05607.

XX

PT Treating or preventing AIDS, ARC or HIV infection - by administering an
 XX immunologically effective amt. of soluble T4 protein.

PS Disclosure; Fig 1; 121pp; English.

CC Entire sequence from T4-encoding plasmid p170-2. It is almost identical
 CC to the sequence published by Madden et al. (1985) with the exception of
 CC three codon changes. At T4 amino acid residue 3, (posn. 403 of entire
 CC sequence) Lys is encoded in stead of Asn. At posn. 64, (posn. 464) Arg
 CC replaces Trp and at posn. 221, (posn. 631) Ser replaces Phe. Soluble T4
 CC can be produced by truncating the CDS to remove the transmembrane and
 CC cytoplasmic domains. The soluble forms may be modified to increase their
 CC immunogenicity by addition of an adjuvant such as incomplete Freund's
 CC adjuvant. The T4 interferes with HIV/T4 interaction and elicits anti-
 CC soluble T4 antibody production. See also AA005608. (Updated on 31-OCT-
 CC 2002 to add missing OS field.)

XX Sequence 2458 AA;

XX Query Match 58.7%; Score 2002.5; DB 2; Length 2458;

XX Best Local Similarity 79.7%; Pred. No. 1e-100; Matches 405; Conservative 9; Mismatches 25; Indels 69; Gaps 4;

QY 1 MNRGVPRHLLVLTALPAPATQGNKVVLGKGGDTVELTCTASQKSIQFHWKNSNOIK 60
 DB 400 MNRGVPRHLLVLTALPAPATQGNKVVLGKGGDTVELTCTASQKSIQFHWKNSNOIK 459
 QY 61 ILGNQGSFLTGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
 DB 460 ILGNQGSFLTGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 519
 QY 121 LVFGLTANSPTHLQGGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 520 LVFGLTANSPTHLQGGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 579
 QY 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPPLAFVTEKLTGSGELMW 240
 DB 580 TWTCTVLQNKQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPPLAFVTEKLTGSGELMW 639
 QY 241 QAEKASSSSKSWITFDLKNKEVSVKRVYTOPDKLQMGKKLPLHLTLPOALPOYAGSGNLTIA 300
 DB 640 QAEKASSSSKSWITFDLKNKEVSVKRVYTOPDKLQMGKKLPLHLTLPOALPOYAGSGNLTIA 699
 QY 301 LEAKTGLKHOEVNLYVMRATQLOXNLTCFVWGPSPKMLSLKLEKKAQVSKREKRYVW 360
 DB 700 LEAKTGLKHOEVNLYVMRATQLOXNLTCFVWGPSPKMLSLKLEKKAQVSKREKRYVW 759
 QY 361 LNPEAGMOCCLSDSGQVLLSNIKYLPTWSTPVEP----- 396
 DB 760 LNPEAGMOCCLSDSGQVLLSNIKYLPTWSTPVEP----- 819
 QY 397 -----KSCDKTH--TC-----PPCAPDELIG 415
 DB 820 RCRHRRRAERMSQIKRLISEKTKCCPHRFQKTCSPRIXGTRPGRSHLQRPQVSABRFLP 879
 QY 416 GRSVFLPFRPKKDTLMISRTPEVTCVV 443
 DB 880 ADQMNVAADPPR---LASCSPPLQFAIV 903

RESULT 75

AA004031

ID AA004031 standard; protein; 2458 AA.

XX AA004031;

XX 25-MAR-2003 (revised)

XX 31-OCT-2002 (revised)

XX 29-MAY-1990 (first entry)

XX Full length T4 encoded by plasmid p170-2.

XX Soluble T4; p170-2; anti-retroviral agent; AIDS; ARC; HIV; AZT.

XX Synthetic.

XX Key Location/Qualifiers

FT Misc-difference 423

FT Misc-difference 425

FT Misc-difference 425

FT Misc-difference 653

FT Misc-difference 653

FT Misc-difference 653

FT Misc-difference 653

FT Misc-difference 653

FT Misc-difference 653

FT Misc-difference 653

FT Misc-difference 653

FT Misc-difference 653

FT Misc-difference 653

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FT Misc-difference 653

FT Misc-difference 653

FT Misc-difference 653

FT Misc-difference 653

FT Misc-difference 653

FT Misc-difference 653

FT Misc-difference 653

Qy	30	LEAKTGLHDEVVLVYMRATOLQKULTCVWGPSTPKMLSLKLENKAYSKREKPVW	360
Dd	700	LEAKTGLHDEVVLVYMRATOLQKULTCVWGPSTPKMLSLKLENKAYSKREKAVW	755
Qy	361	LNPEAGMOCLLSDSQVLLNESIKVLPWSTPVEP-----	366
Dd	760	LNPEAGMOCLLSDSQVLLNESIKVLPWSTPVPQPMILVLGVAGLLFIIGIFPCV	819
Qy	397	-----KSCDKT-----TC-----PPCAPPELLG	415
Dd	820	RCRHRRRQAEKMSQIKRLSEKKTCCPRFQKTCSPXGTRPGKSHLQPPQVAPRFLP	879
Qy	416	GPSVFLPPPKXDTLMISRTPETVTCVV	443
Dd	880	ADQMNVADPRP-----IASCSPFLQPAIV	903
RESULT 76			
ID	AA06373	standard; protein; 458 AA.	
AC	AA06373;		
DT	31-OCT-2002	(revised)	
DT	20-DEC-1990	(first entry)	
XX	T4 encoded by plasmid p170-2.		
XX	plasmid p170-2; soluble T4 protein; AIDS; ARC; HIV.		
XX	Synthetic.		
XX	Key	Location/Qualifiers	
FT	Peptide	1..23	
FT		/label= hydrophobic/secretory signal	
FT	Region	24..117	
FT		/label= extracellular	
FT	Region	/note= "homology to V-regions"	
FT		118..132	
FT	Region	/label= extracellular	
FT		/note= "homology to J-regions"	
FT	Region	133..397	
FT		/label= extracellular	
FT	Region	/note= "glycosylated region"	
FT		398..418	
FT	Region	/label= transmembrane sequence	
FT		/note= "hydrophobic"	
FT	Region	419..458	
FT		/label= intracytoplasmic	
FT		/note= "very hydrophilic"	
XX	W09008198-A.		
XX	26-JUL-1990.		
XX	18-JAN-1989;	89US-00300096.	
XX	18-JAN-1989;	89US-00300096.	
XX	(HARD) HARVARD COLLEGE.		
XX	Letvin NA;		
XX	WPI, 1990-254040/33.		
XX	N-PSDB; AAQ05607.		
XX	Treating or preventing AIDS, ARC or HIV infection - by administering an immunologically effective amt. of soluble T4 protein.		
XX	Disclosure, Fig 1, 12ipp; English.		
XX	Soluble T4 can be produced by truncating the CDS to remove the		

Query Match	58.6%	Score 2002	DB 2	Length 458
Best Local Similarity	98.7%	Pred. No. 1.8e-101		
Matches 391	Conservative 1	Mismatches 4	Indels 0	Gaps 0
QY	1	MNRGVPFRHLLIVLQALALPAATQGNKVVYGGKGDVETLCTASQKKSIQPHMKNNOIK	60	
DB	1	MNRGVPFRHLLIVLQALALPAATQGNKVVYGGKGDVETLCTASQKKSIQPHMKNNOIK	60	
QY	61	ILNQGSFLTKGSPKLNDRADSRSLWDQGNFLLIKNLKIETSDTYICEVEDQKEEVOL	120	
DB	61	ILNQGSFLTKGSPKLNDRADSRSLWDQGNFLLIKNLKIETSDTYICEVEDQKEEVOL	120	
QY	121	LVFELTANSTHLLIQGSLFTLTLESPPGSSPSVQCRSPRKNIQGGKTLISVSQLELQDSG	180	
DB	121	LVFELTANSTHLLIQGSLFTLTLESPPGSSPSVQCRSPRKNIQGGKTLISVSQLELQDSG	180	
QY	181	TWTTCTVQONQKVEFKDIDIVLAFQKASSIVYKKEGQVFFSFLAFTVEKLTGSGELMW	240	
DB	181	TWTTCTVQONQKVEFKDIDIVLAFQKASSIVYKKEGQVFFSFLAFTVEKLTGSGELMW	240	
QY	241	QAEPASSSSKWITFDLKNKEVSVKRVTDPRKLOMGKLPHLTLPLQALPYAGSGNLTIA	300	
DB	241	QAEPASSSSKWITFDLKNKEVSVKRVTDPRKLOMGKLPHLTLPLQALPYAGSGNLTIA	300	
QY	301	LEATGTGLHDEVLLVMRATQLOKNLTCEVMGPTSPKMLSLKLENKAAKYSKREKPVWV	360	
DB	301	LEATGTGLHDEVLLVMRATQLOKNLTCEVMGPTSPKMLSLKLENKAAKYSKREKPVWV	360	
QY	361	LNPEAGMWQCLISDSQVLLLESNIKVLPTWSTPVEP	396	
DB	361	LNPEAGMWQCLISDSQVLLLESNIKVLPTWSTPVEP	396	
RESULT 77				
ID	AAP94703	standard; protein; 524 AA.		
AC	AAP94703			
XX	AAP94703			
XX	25-MAR-2003	(revised)		
DT	22-MAR-1991	(first entry)		
XX	Sequence encoded by T4 lymphocyte cDNA obtained from PBL clone lambda-203			
DE	-4.			
XX	HIV, soluble T4; immunotherapeutic; prophylactic; diagnostic; AIDS; ARC.			
XX	Homo sapiens.			
OS	Homo sapiens.			
XX	Key	Location/Qualifiers		
FT	Misc-difference	67		
FT	Misc-difference	/note= "AA DESIGNATED NUMBER -23"		
FT	Misc-difference	90		
FT	Misc-difference	/note= "AA DESIGNATED NUMBER 1"		
FT	Misc-difference	92		
FT	Misc-difference	/note= "MATURE N-TERMINUS"		
XX	W08901940-A.			
XX	09-MAR-1989.			
XX	01-SEP-1988;	88MO-US002940.		

PR 04-SEP-1987; 87US-00094322.
 PR 07-JAN-1988; 88US-00141649.
 XX
 PA (BIOI) BIOGEN INC.
 XX
 PI Fisher RA, Gilbert W, Sato VL, Flavell RA, Maraganore JM;
 XX
 DR WPI; 1989-085519/11.
 XX
 DR N-PSDB; AAN90642.
 XX
 PT DNA sequences coding for soluble T4-like polypeptide(s) - used in
 PT immuno:therapeutic and immunosuppressive compns. and for preventing,
 PT treating or detecting AIDS.
 XX
 PS Disclosure; Fig 3; 207pp; English.
 XX
 CC The polypeptides encoded are useful in immunotherapeutic, prophylactic
 CC and diagnostic compns. They can be used to purify HIV from a sample. The
 CC soluble T4 protein-based compns. are useful in treating immunodeficient
 CC patients suffering from diseases caused by agents whose primary targets
 CC are T4+ lymphocytes. They can be used for preventing, treating or
 CC detecting AIDS, ARC and HIV infection. (Updated on 25-MAR-2003 to correct
 CC PR field.)
 XX
 SQ Sequence 524 AA;

Query Match 58.6%; Score 2002; DB 1; Length 524;
 Best Local Similarity 98.7%; Pred. No. 2.1e-101;
 Matches 391; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 1 NMRGVFPHLLLVQALPAPATQGNKVLGKKGDVTELTCTASQKSIQFHMKNNOIK 60
 DB 67 NMRGVFPHLLLVQALPAPATQGNKVLGKKGDVTELTCTASQKSIQFHMKNNOIK 126
 QY 61 ILNGGSSFLTGKPSKLNDRADSRSLMDQGNPPLIRKLIKEDSDTYICEVEDQKEEYOL 120
 DB 127 ILNGGSSFLTGKPSKLNDRADSRSLMDQGNPPLIRKLIKEDSDTYICEVEDQKEEYOL 186
 QY 121 LVFGLTANSDDHLLQGGSLTTLTSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 187 LVFGLTANSDDHLLQGGSLTTLTSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 246
 QY 181 TWTCTVLQNGKKEFKIDIVLAFQKASSIYKKKEGQVEFSPPLAFVTEKLTSGGELMW 240
 DB 247 TWTCTVLQNGKKEFKIDIVLAFQKASSIYKKKEGQVEFSPPLAFVTEKLTSGGELMW 306
 QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKPLHLTLPOALPOVAGSGNLTIA 300
 DB 307 QAERASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKPLHLTLPOALPOVAGSGNLTIA 366
 QY 301 LEAKTGKLGHEVNLVVMRATOLQKNLTCEVNGPTSPKMLSLKENKEAKVSKREKPYWV 360
 DB 367 LEAKTGKLGHEVNLVVMRATOLQKNLTCEVNGPTSPKMLSLKENKEAKVSKREKPYWV 426
 QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVP 396
 DB 427 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVP 462

RESULT 78
 AAB07768
 ID AAB07768 standard; protein; 394 AA.
 XX
 AC AAB07768;
 XX
 DT 07-NOV-2000 (first entry)
 XX
 DE The soluble extracellular domain of the T4 glycoprotein.
 XX
 KW Human; T4 glycoprotein; human immunodeficiency virus; HIV;
 KW envelope glycoprotein; AIDS; virus binding.
 XX
 OS Homo sapiens.

XX
 PN US6093539-A.
 XX
 PD 25-JUL-2000.
 XX
 PF 06-JUN-1995; 95US-00466368.
 XX
 PR 21-AUG-1986; 86US-00898587.
 XX
 PR 11-JUN-1991; 91US-00713554.
 PR 06-JUL-1992; 92US-00909021.
 PR 12-DEC-1994; 94US-00354452.
 XX
 PA (UYCO) UNIV COLUMBIA NEW YORK.
 XX
 PI Maddon PJ, Chess L, Axel R, Weiss R, McDougal JS, Littman DR;
 XX
 DR WPI; 2000-505203/45.
 XX
 DR N-PSDB; AAA59351.
 XX
 PT New isolated nucleic acid encoding a human T cell surface protein and the
 PT soluble surface T4 glycoprotein that it encodes, useful as prophylaxis
 PT for treating a subject infected with human acquired immune deficiency
 PT syndrome virus.
 XX
 PS Disclosure; Col 11-14; 69pp; English.
 XX
 CC The present sequence represents an aqueous-soluble polypeptide comprising
 CC a portion of a human T4 glycoprotein. The portion specifically forms a
 CC complex with a human immunodeficiency virus (HIV) envelope glycoprotein.
 CC The DNA is useful for producing the soluble surface T4 glycoprotein. The
 CC soluble surface T4 glycoprotein is useful as a therapeutic agent, i.e. as
 CC prophylaxis for treating a subject infected with an HIV virus. Thus, the
 CC soluble T4 glycoprotein is useful for treating human AIDS. The soluble T4
 CC glycoprotein is also useful in diagnostic or screening assays, e.g. for
 CC screening inhibitors of virus binding, or for detecting and quantitating
 CC T4, T4+ cells and antibodies to T4, which are of diagnostic value for
 CC AIDS
 XX
 SQ Sequence 394 AA;

Query Match 58.6%; Score 2001; DB 3; Length 394;
 Best Local Similarity 98.7%; Pred. No. 1.7e-101;
 Matches 389; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY 1 NMRGVFPHLLLVQALPAPATQGNKVLGKKGDVTELTCTASQKSIQFHMKNNOIK 60
 DB 1 NMRGVFPHLLLVQALPAPATQGNKVLGKKGDVTELTCTASQKSIQFHMKNNOIK 60
 QY 61 ILNGGSSFLTGKPSKLNDRADSRSLMDQGNPPLIRKLIKEDSDTYICEVEDQKEEYOL 120
 DB 61 ILNGGSSFLTGKPSKLNDRADSRSLMDQGNPPLIRKLIKEDSDTYICEVEDQKEEYOL 120
 QY 121 LVFGLTANSDDHLLQGGSLTTLTSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 187 LVFGLTANSDDHLLQGGSLTTLTSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 240
 QY 181 TWTCTVLQNGKKEFKIDIVLAFQKASSIYKKKEGQVEFSPPLAFVTEKLTSGGELMW 240
 DB 247 TWTCTVLQNGKKEFKIDIVLAFQKASSIYKKKEGQVEFSPPLAFVTEKLTSGGELMW 300
 QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKPLHLTLPOALPOVAGSGNLTIA 300
 DB 307 QAERASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKPLHLTLPOALPOVAGSGNLTIA 360
 QY 301 LEAKTGKLGHEVNLVVMRATOLQKNLTCEVNGPTSPKMLSLKENKEAKVSKREKPYWV 360
 DB 367 LEAKTGKLGHEVNLVVMRATOLQKNLTCEVNGPTSPKMLSLKENKEAKVSKREKPYWV 426
 QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVP 394
 DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVP 394

ID	AA	Location/Qualifiers	Label	Signal	Sequence
XX	AA	25-MAR-2003 (revised)			
XX	DT	31-MAR-1992 (first entry)			
XX	XX	Chimpanzee sol. CD4 encoded by pSQ200.			
XX	XX	Human immunodeficiency virus; HIV; gp 120; AIDS; ARC; glycoprotein;			
XX	XX	acquired immune deficiency syndrome; AIDS related complex;			
XX	XX	T helper lymphocytes.			
XX	OS	Pan troglodytes.			
XX	XX	Key	1..25		
XX	XX	Peptide	/label= signal_sequence		
XX	XX	WO9118618-A.			
XX	XX	12-DEC-1991.			
XX	XX	25-MAY-1990; 90US-00529186.			
XX	XX	25-MAY-1990; 90US-00529186.			
XX	XX	(BIOJ) BIOGEN INC.			
XX	XX	Fisher RA, Hession C, Burkly LC;			
XX	XX	WP1, 1992-007200/01.			
XX	XX	N-PSDB; AAQ20326.			
XX	XX	New immuno-therapeutic human CD4 variance and deriva. - elicite AB			
XX	XX	production to HIV gp120, useful in treating, preventing and diagnosing			
XX	XX	AIDS, ARC and HIV infections.			
XX	XX	Claim 15; Fig 21; 179pp; English.			
XX	XX	The sequence was deduced from the DNA sequence of clone pSQ200 which was			
XX	XX	obtd. by cloning using a reverse transcriptase/PCR amplification			
XX	XX	procedure with a non-specific oligo dt to prime first strand synthesis.			
XX	XX	The PCR fragments were ligated into sequencing plasmid pNN08 (see			
XX	XX	AAQ20326) The DNA sequence can be used to express recombinant soluble CD4			
XX	XX	and analogues for use in diagnosis and treatment of diseases caused by			
XX	XX	infective agents whose primary targets are T4 lymphocytes. See also			
XX	XX	AAQ20148-R20155 and AAQ21078. (updated on 25-MAR-2003 to correct PA			
XX	XX	field.)			
XX	XX	Sequence 399 AA;			
XX	XX	Query Match 58.6%; Score 2000; DB 2; Length 399;			
XX	XX	Best Local Similarity 98.2%; Pred. No. 2e-101;			
XX	XX	Matches 389; Conservative 1; Mismatches 6; Indels 0; Gaps 0;			
XX	XX	1 MNRGVPFHHLLVLTOTALLPAAQGNKVVLGKGGDTVELTCTASQKSIQPHMKNNOIK 60			
XX	XX	1 MNRGVPFHHLLVLTOTALLPAAQGNKVVLGKGGDTVELTCTASQKSIQPHMKNNOIK 60			
XX	XX	1 ILGNQGSFLTKGPKSLNDRADRSRLMDQGNPLIIKNLKIEDSDTYICEVEDQEEVQL 120			
XX	XX	61 ILGNQGSFLTKGPKSLNDRADRSRLMDQGNPLIIKNLKIEDSDTYICEVEDQEEVQL 120			
XX	XX	61 ILGNQGSFLTKGPKSLNDRADRSRLMDQGNPLIIKNLKIEDSDTYICEVEDQEEVQL 120			
XX	XX	121 LVFGILTANSSTHLLQGGSLTTLTLESPPGSSPVSQCRSPRGKNIQGGKTLVSQLELDQSG 180			
XX	XX	121 LVFGILTANSSTHLLQGGSLTTLTLESPPGSSPVSQCRSPRGKNIQGGKTLVSQLELDQSG 180			
XX	XX	121 LVFGILTANSSTHLLQGGSLTTLTLESPPGSSPVSQCRSPRGKNIQGGKTLVSQLELDQSG 180			
XX	XX	181 TWTCGVLTQONOKKVEKIDIVLAPKASSIYKKEGEVQVSPFLAFIVYEKLTGSGELVW 240			
XX	XX	181 TWTCGVLTQONOKKVEKIDIVLAPKASSIYKKEGEVQVSPFLAFIVYEKLTGSGELVW 240			
XX	XX	181 TWTCGVLTQONOKKVEKIDIVLAPKASSIYKKEGEVQVSPFLAFIVYEKLTGSGELVW 240			

QY	241	QAERSSSSKSMTPPLKNKEVSVKRVTDOPDKLQMGKKLPLHLTLPLQALPOYAGSGMLTLA	300
DB	241	QAERSSSSKSMTPPLKNKEVSVKRVTDOPDKLQMGKKLPLHLTLPLQALPOYAGSGMLTLA	300
QY	301	LEAKTGKTHOEYNLVVMBRATOLQKNTLCEWGPSTPKMLSLKLENKEAKVSKREKPVWV	360
DB	301	LEAKTGKTHOEYNLVVMBRATOLQKNTLCEWGPSTPKMLSLKLENKEAKVSKREKPVWV	360
QY	361	LNPEAGMWQCLLSDSGQVLLESNITVLTPTWSPVDP	396
DB	361	LNPEAGMWQCLLSDSGQVLLESNITVLTPTWSPVDP	396
RESULT 80			
ID	AA011285	standard; protein; 458 AA.	
XX	AA011285;		
AC	25-MAR-2003	(revised)	
XX	09-JAN-2003	(revised)	
DT	29-APR-1991	(first entry)	
XX	gpi20 binding protein.		
DE	Human; CD4; AIDS; HIV1; SIV; gpi20.		
KM	Human; CD4; AIDS; HIV1; SIV; gpi20.		
XX	Unidentified.		
OS	Unidentified.		
XX	Key	Location/Qualifiers	
FH	Misc-difference 59	/label= Thr or Ile	
FT	Misc-difference 93	/label= Thr or Pro	
FT			
XX	EP414178-A.		
XX	27-FEB-1991.		
PD	18-AUG-1990;	90EP-00115877.	
XX	23-AUG-1989;	89US-00397782.	
XX	(GEHO) GEN HOSPITAL CORP.		
PA	Seed B, Camerini D;		
XX	WPI; 1991-059419/09.		
XX	N-PSDB; AA010887.		
DR	New non-human primate and human CD4 or gpi20 molecules - used to treat		
PT	HIV or SIV and immunoglobulin and gpi20 binding molecules from new fusion		
PT	proteins.		
PS	Claim 17; Page 57; 87pp; English.		
XX	The fragment from residues 1-134 is also independently claimed. The sub-		
CC	fragment (and the complete polypeptide) can bind to HIV gpi20. See also		
CC	AA010885-6, AA010888 (updated on 09-JAN-2003 to add missing OS field.)		
CC	(Updated on 25-MAR-2003 to correct PA field.)		
SQ	Sequence 458 AA;		
Query Match 58.6%; Score 2000; DB 2; Length 458;			
Best Local Similarity 98.2%; Pred. No. 2.3e-101;			
Matches 389; Conservative 2; Mismatches 5; Indels 0; Gaps 0			
QY	1	MNRGVFPHLLLVQLALLPATQGNKYVLGKKGDVVELTCTASQKKSIOFHKNSNQIK	60
DB	1	MNRGVFPHLLLVQLALLPATQGNKYVLGKKGDVVELTCTASQKKSIOFHKNSNQIK	60
QY	61	ILGNQGSFLTGPKSLGNDRADSRKSLMDQGNPPLIINKUKIEDSDTYICEVEDQKEVQL	120

```

Db      61 ILGNQSSFLTKGPSKLNDRADSRSLMDQGNFLLIKNLKIBDSPTYICEVDQKEEVL 120
Qy      121 LVFGLTANSDBTHLLOQOSLTLTLESPPGSSPVQCSPPGKNIQGGKTLVSQLELQDSG 180
Db      121 LVFGLTANSDBTHLLOQOSLTLTLESPPGSSPVQCSPPGKNIQGGKTLVSQLELQDSG 180
Qy      181 TWTCTVLQNOQKKEFKIDIVVLAFOKASSIVYKKEGEVSEFPLAFTVEKLTGSGELMW 240
Db      181 TWTCTVLQNOQKKEFKIDIVVLAFOKASSIVYKKEGEVSEFPLAFTVEKLTGSGELMW 240
Qy      241 QAEKASSSSKSWITFDLKNKEVSVKRVTQDPKLOMGKKLPLHLTPQALPQYAGSGNLTLA 300
Db      241 QAEKASSSSKSWITFDLKNKEVSVKRVTQDPKLOMGKKLPLHLTPQALPQYAGSGNLTLA 300
Qy      301 LEAKTGKLEHGVNLVVMRATOLQKNLTCEWGPPTSFKMLSLKLENKAKVSKREKPVW 360
Db      301 LEAKTGKLEHGVNLVVMRATOLQKNLTCEWGPPTSFKMLSLKLENKAKVSKREKPVW 360
Qy      361 LNPEAGMOCCLSDSGVLLSNIKYLPTWSTPVEP 396
Db      361 LNPEAGMOCCLSDSGVLLSNIKYLPTWSTPVEP 396

```

RESULT 81

AA10988
ID AA10988 standard; protein; 458 AA.

AA10988;

25-MAR-2003 (revised)
29-APR-1991 (first entry)

Chimpanzee CD4 protein.

Chimpanzee; CD4; AIDS; HIV1; SIV.

Pan troglodytes.

Key Location/Qualifiers
Protein 26
/label= mature CD4

EP414178-A.

27-FEB-1991.

18-AUG-1990; 90BP-00115877.

23-AUG-1989; 89US-00397782.

(GENO) GEN HOSPITAL CORP.

Seed B, Camerini D;

WPI: 1991-059419/09.

N-PSDB; AAQ10886.

New non-human primate and human CD4 or gp120 molecules - used to treat HIV or SIV and immunoglobulin and gp120 binding molecules from new fusion proteins.

Claim 4; Page 45; 87pp; English.

The CD4 protein or HIV gp120-binding fragments of it are used to detect and treat HIV and SIV infection. Animals which can be treated include humans, baboons, orang-utans, chimpanzees, gorillas and rhesus monkeys.

The chimpanzee CD4 is 99 per cent homologous to its human counterpart, possessing 5 amino acid substitutions in the 433 residue predicted mature polypeptide. See also AAQ10885, AAQ10887-8. (Updated on 25-MAR-2003 to correct PA field.)

Sequence 458 AA;

Query Match 58.6%; Score 2000; DB 2; Length 458;
Best Local Similarity 98.2%; Pred. No. 2.3e-101;
Matches 389; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

```

Qy      1 NMRGVPFPHLLLVLTALLPATQGNKVLGKGGTVELCTASQKSIQFHMKNNOIK 60
Db      1 NMRGVPFPHLLLVLTALLPATQGNKVLGKGGTVELCTASQKSIQFHMKNNOIK 60
Qy      61 ILGNQSSFLTKGPSKLNDRADSRSLMDQGNFLLIKNLKIBDSPTYICEVDQKEEVL 120
Db      61 ILGNQSSFLTKGPSKLNDRADSRSLMDQGNFLLIKNLKIBDSPTYICEVDQKEEVL 120
Qy      121 LVFGLTANSDBTHLLOQOSLTLTLESPPGSSPVQCSPPGKNIQGGKTLVSQLELQDSG 180
Db      121 LVFGLTANSDBTHLLOQOSLTLTLESPPGSSPVQCSPPGKNIQGGKTLVSQLELQDSG 180
Qy      181 TWTCTVLQNOQKKEFKIDIVVLAFOKASSIVYKKEGEVSEFPLAFTVEKLTGSGELMW 240
Db      181 TWTCTVLQNOQKKEFKIDIVVLAFOKASSIVYKKEGEVSEFPLAFTVEKLTGSGELMW 240
Qy      241 QAEKASSSSKSWITFDLKNKEVSVKRVTQDPKLOMGKKLPLHLTPQALPQYAGSGNLTLA 300
Db      241 QAEKASSSSKSWITFDLKNKEVSVKRVTQDPKLOMGKKLPLHLTPQALPQYAGSGNLTLA 300
Qy      301 LEAKTGKLEHGVNLVVMRATOLQKNLTCEWGPPTSFKMLSLKLENKAKVSKREKPVW 360
Db      301 LEAKTGKLEHGVNLVVMRATOLQKNLTCEWGPPTSFKMLSLKLENKAKVSKREKPVW 360
Qy      361 LNPEAGMOCCLSDSGVLLSNIKYLPTWSTPVEP 396
Db      361 LNPEAGMOCCLSDSGVLLSNIKYLPTWSTPVEP 396

```

RESULT 82

AA20150
ID AA20150 standard; protein; 400 AA.

AA20150;

25-MAR-2003 (revised)

31-MAR-1992 (first entry)

Chimpanzee sol. CD4 sequence from pS0205.

Human immunodeficiency virus; HIV; gp 120; AIDS; ARC; glycoprotein; acquired immune deficiency syndrome; AIDS related complex;

T helper lymphocytes.

Pan troglodytes.

Key Location/Qualifiers
Peptide 1..25
/label= signal_sequence

WO9118618-A.

12-DEC-1991.

25-MAY-1990; 90US-00529186.

25-MAY-1990; 90US-00529186.

(BIOJ) BIOGEN INC.

Fisher RA, Hession C, Burckly LC;

WPI: 1992-007200/01.

N-PSDB; AAQ20325.

New immuno-therapeutic human CD4 variants and derivs. - elicit AB production to HIV gp.120, useful in treating, preventing and diagnosing AIDS, ARC and HIV infections.

```

XX  Claim 15; Fig 20; 179pp; English.
PS
XX
CC  The sequence was deduced from the DNA sequence of clone PS0205 which was
CC  obtd. by cloning using a reverse transcriptase/PCR amplification
CC  procedure. The DNA sequence can be used to express recombinant soluble
CC  CD4 and analogues for use in diagnosis and treatment of diseases caused
CC  by infective agents whose primary targets are T4+ lymphocytes. See also
CC  AAR20148-R20155 and AAR21078. (Updated on 25-MAR-2003 to correct PA
CC  field.)
XX
SQ  Sequence 400 AA:
Query Match      58.4%; Score 1995; DB 2; Length 400;
Best Local Similarity 98.0%; Pred. No. 3.7e-101;
Matches 388; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

OY  1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGGTVELTCTASOKSIOFHMKNNSQIK 60
DB  1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGGTVELTCTASOKSIOFHMKNNSQTK 60
OY  61 ILNGGSEFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIETSDTYICEVEDQKEEVOL 120
DB  61 ILNGGSEFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIETSDTYICEVEDQKEEVOL 120
OY  121 LVFGLTASDTHLLQGQSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB  121 LVFGLTASDTHLLQGQSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
OY  181 TWTCVTVLONOKKVEKIDIVVLAFOKASSIVYKKEGEVESPFLATFVEKLTGSGELMW 240
DB  181 TWTCVTVLONOKKVEKIDIVVLAFOKASSIVYKKEGEVESPFLATFVEKLTGSGELMW 240
OY  241 QAERASSSKSMITFDLKNKEVSVKRVTDQPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
DB  241 QAERASSSKSMITFDLKNKEVSVKRVTDQPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
OY  301 LEAKTGKLGHOENVLVVNRATQLOKNLTCEVWGPTSPKMLSLKLENKEAVSKREKPVV 360
DB  301 LEAKTGKLGHOENVLVVNRATQLOKNLTCEVWGPTSPKMLSLKLENKEAVSKREKAVV 360
OY  361 LNPEAGMWOCILSDSGVLLSINIKVLPWTSTVPQ 396
DB  361 LNPEAGMWOCILSDSGVLLSINIKVLPWTSTVPQ 396

RESULT 83
AAR04910
ID  AAR04910 standard; protein; 458 AA.
XX
XX  AAR04910;
AC  XX
XX  31-OCT-2002 (revised)
DT  02-OCT-1990 (first entry)
XX
DE  T4 protein as encoded by p170.2.
XX
XX  T4 protein; immunotoxin; Pseudomona endotoxin A; AIDS; HIV; ARC;
KW  angiogenin; fusion protein.
XX
OS  Synthetic.
XX
XX  Key Location/Qualifiers
XX  Peptide 1..26
XX  Protein /label= signal peptide
XX  27..458
XX  /label= T4 protein
XX  Misc-difference replace(87,W)
XX  /note= "differs from Madden et al"
XX  Misc-difference replace(254,P)
XX  /note= "differs from Madden et al"
XX
PN  MO9004414-A.

```

```

XX  03-MAY-1990.
PD
XX
XX  18-OCT-1988; 88US-00259355.
PF
XX  18-OCT-1988; 88US-00259355.
RR
XX  (BIOJ ) BIOGEN INC.
PA
PI  Meade HM, Lobb RR, Gates LL, Winkler G;
XX  WPI; 1990-163876/21.
DR  N-PSDB; AA004555.
XX
XX  New immunotoxin contg. soluble T4 protein components and toxin - esp.
PT  Pseudomonas endotoxin A, for treating or controlling AIDS and related
PT  conditions, and new DNA sequences.
XX
XX  Disclosure; Page 7; -pp; English.
PS
XX
XX  The T4 protein encoded by p170.2 is almost identical to that reported by
XX  P.J. Madden et al (Cell, 42, pp 93-104 (1985)). The Madden sequence was
XX  revised in 1988 to correct a DNA sequencing error at AA 3 (corrected from
XX  Asp to Lys; see M12807 in GenBank). The DNA may be truncated (to remove
XX  transmembrane and intracellular regions) and/or modified by SDM, pref. so
XX  the prod. extends from AAs 3-183 of the mature protein. This DNA can then
XX  be ligated to a toxin DNA esp. angiogenin, or a fragment of Pseudomonas
XX  exotoxin A contg. the translocation and ADP-ribosylation domains. The
XX  hybrid DNA can then be inserted into an expression vector and used to
XX  produce recombinant fusion protein which is useful for preventing or
XX  treating AIDS, ARC, and HIV infections. The T4 protein is an HIV receptor
XX  which binds to virus or to infected cells carrying the gp120/160 marker
XX  antigen, so provides v. specific targeting with minimal damage to non-
XX  target cells. (Updated on 31-OCT-2002 to add missing OS field.)
XX
SQ  Sequence 458 AA:
Query Match      58.4%; Score 1994; DB 2; Length 458;
Best Local Similarity 98.2%; Pred. No. 4.9e-101;
Matches 389; Conservative 3; Mismatches 4; Indels 0; Gaps 0;

OY  1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGGTVELTCTASOKSIOFHMKNNSQIK 60
DB  1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGGTVELTCTASOKSIOFHMKNNSQIK 60
OY  61 ILNGGSEFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIETSDTYICEVEDQKEEVOL 120
DB  61 ILNGGSEFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIETSDTYICEVEDQKEEVOL 120
OY  121 LVFGLTASDTHLLQGQSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB  121 LVFGLTASDTHLLQGQSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
OY  181 TWTCVTVLONOKKVEKIDIVVLAFOKASSIVYKKEGEVESPFLATFVEKLTGSGELMW 240
DB  181 TWTCVTVLONOKKVEKIDIVVLAFOKASSIVYKKEGEVESPFLATFVEKLTGSGELMW 240
OY  241 QAERASSSKSMITFDLKNKEVSVKRVTDQPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
DB  241 QAERASSSKSMITFDLKNKEVSVKRVTDQPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
OY  301 LEAKTGKLGHOENVLVVNRATQLOKNLTCEVWGPTSPKMLSLKLENKEAVSKREKPVV 360
DB  301 LEAKTGKLGHOENVLVVNRATQLOKNLTCEVWGPTSPKMLSLKLENKEAVSKREKAVV 360
OY  361 LNPEAGMWOCILSDSGVLLSINIKVLPWTSTVPQ 396
DB  361 LNPEAGMWOCILSDSGVLLSINIKVLPWTSTVPQ 396

RESULT 84
AAP93010
ID  AAP93010 standard; protein; 399 AA.

```

```

XX AAP93010;
AC
XX
XX 25-MAR-2003 (revised)
DT
XX 03-AUG-1992 (first entry)
DT
XX
XX Genetic construct which encodes CD4 linked to human IgM at the Met2 site
DE upstream of the CH1 region (fusion protein CD4Mmu).
XX
XX Fusion protein; immunoglobulin-like molecule; HIV; SIV; therapy;
KW diagnosis; CD4; gp120; binding fragment; glycoprotein; variable region.
XX
XX Homo sapiens.
OS
XX
XX EP325262-A.
PN
XX
XX 26-JUL-1989.
PD
XX
XX 20-JAN-1989; 89EP-00100913.
PF
XX
XX 22-JAN-1988; 88US-00147351.
PR
XX
XX (GENO ) GEN HOSPITAL CORP.
PA
XX
XX Seed B;
PI
XX
XX WPI; 1989-214472/30.
DR
XX N-PSDB; AAN90358.
DR
XX
XX Immunoglobulin-CD4 fusion proteins - used for treating HIV or SIV
PT infections or detecting HIV or SIV in sample.
PT
XX
XX Example; Table 3, Page 34-40; 68pp; English.
XX
XX The fusion protein genes of the invention pref. comprises cDNA sequences
CC which encode CD4 or a fragment which binds gp120 ligated to an expression
CC plasmid which encodes an antibody in which the variable region of the
CC gene has been deleted (see WO87-02671). The CD4 portion of the fusion
CC protein may comprise the complete CD4 sequence, the 370 AA extracellular
CC region and the membrane spanning domain, or the extracellular region. The
CC Ig heavy chain is pref. from IgM, IgG1 or IgG3. The following are
CC specifically claimed: fusion proteins CD4lambda1, CD4Mmu, CD4Pmu,
CC CD4lambda1, and CD4Mmu (No. 67608), PCDA4lambda (No. 67609) and
CC PCDA4lambda1 (No. 67610). (Updated on 25-MAR-2003 to correct PA field.)
XX
XX
XX Sequence 399 AA;
SQ
Query Match 58.1%; Score 1982; DB 1; Length 399;
Best Local Similarity 98.5%; Pred. No. 1.9e-100;
Matches 388; Conservative 1; Mismatches 5; Indels 0; Gaps 0;
QY 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60
DB 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60
QY 61 ILGNQSSFLTKGSSKLNDRADSRSLMDQGNPPLIKNLIKESDPTYTEVEDQKEEYQL 120
DB 61 ILGNQSSFLTKGSSKLNDRADSRSLMDQGNPPLIKNLIKESDPTYTEVEDQKEEYQL 120
QY 121 LVFGLTANSDTHLLOGQSLLTLTLESPGSSPVQCSPRGKNIOGSKTSLVSQLELDSDG 180
DB 121 LVFGLTANSDTHLLOGQSLLTLTLESPGSSPVQCSPRGKNIOGSKTSLVSQLELDSDG 180
QY 121 LVFGLTANSDTHLLOGQSLLTLTLESPGSSPVQCSPRGKNIOGSKTSLVSQLELDSDG 180
DB 121 LVFGLTANSDTHLLOGQSLLTLTLESPGSSPVQCSPRGKNIOGSKTSLVSQLELDSDG 180
QY 181 TWTCVTLOQKQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSEPLAFTVEKLTGSGELMW 240
DB 181 TWTCVTLOQKQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSEPLAFTVEKLTGSGELMW 240
QY 241 QMRASSSSKSWITFDLKKEVSVKRTQPKLOMKKULPLHLTLPALQYVAGSGNLTJA 300
DB 241 QMRASSSSKSWITFDLKKEVSVKRTQPKLOMKKULPLHLTLPALQYVAGSGNLTJA 300
QY 301 LEAKTGKLTQHOEVNLYVMRATQLOKNTLCEVWGPTSPKMLSLKLEKKAQVSKREKPVAV 360
DB 301 LEAKTGKLTQHOEVNLYVMRATQLOKNTLCEVWGPTSPKMLSLKLEKKAQVSKREKPVAV 360

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DB 301 LEAKTGKLTQHOEVNLYVMRATQLOKNTLCEVWGPTSPKMLSLKLEKKAQVSKREKPVAV 360
QY 361 LNPEAGMWOCCLSDSGOVLLESNTKVLPTWSTPV 394
DB 361 LNPEAGMWOCCLSDSGOVLLESNTKVLPTWSTPV 394
RESULT 85
AAR20154
ID AAR20154 standard; protein; 400 AA.
XX
XX AAR20154;
AC
XX
XX 24-OCT-2003 (revised)
DT
XX 25-MAR-2003 (revised)
DT
XX 31-MAR-1992 (first entry)
DT
XX
XX Sol. rhesus-human chimeric CD4 encoded by pDG100.
DE
XX
XX Human immunodeficiency virus; HIV; gp 120; AIDS; ARC; glycoprotein;
KW acquired immune deficiency syndrome; AIDS related complex; monkey;
KW T helper lymphocytes.
XX
XX Macaca mulatta; (Rhesus).
OS
XX Homo sapiens.
OS
XX Chimeric.
FH
XX
XX Key Location/Qualifiers
FH
XX FT Region 1..131
FT /note= "rhesus CD4 encoded by pSQ146 (AAQ20328)"
FT Peptide 1..25
FT /label= signal_sequence
FT Region 132..400
FT /note= "human CD4 encoded by pBG391 (US8802940)"
XX
XX WO9118618-A.
PN
XX
XX 12-DEC-1991.
PD
XX
XX 25-MAY-1990; 90US-00529186.
PF
XX
XX 25-MAY-1990; 90US-00529186.
PR
XX
XX 25-MAY-1990; 90US-00529186.
XX
XX (BIOG ) BIOGEN INC.
PA
XX
XX Fisher RA, Hession C, Burkly LC;
PI
XX
XX WPI; 1992-007200/01.
DR
XX N-PSDB; AAQ20329.
DR
XX
XX New immuno-therapeutic human CD4 variants and derivs. - elicit AB
PT production to HIV gp.120, useful in treating, preventing and diagnosing
PT AIDS, ARC and HIV infections.
PT
XX
XX Claim 14; Fig 13; 179pp; English.
PS
XX
XX The sequence is encoded by pDG100, chimeric plasmid prepd. from human and
CC rhesus derived CD4 DNA. The plasmid can be used to express recombinant
CC sol. chimeric CD4 for use in diagnosis and treatment of diseases caused
CC by infective agents whose primary targets are T4+ lymphocytes. See also
CC AAR20148-R2015 and AAR21078. (Updated on 25-MAR-2003 to correct PA
CC field.) (Updated on 24-OCT-2003 to standardise OS field)
XX
XX
XX Sequence 400 AA;
SQ
Query Match 57.3%; Score 1955; DB 2; Length 400;
Best Local Similarity 95.5%; Pred. No. 5.7e-99;
Matches 378; Conservative 10; Mismatches 8; Indels 0; Gaps 0;
QY 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60
DB 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60

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Qy	6	ILGNQGSFPLTKGSGSKLNDPADSRRSIMDGNFPLITIKLKLTIEDSPYICEVEDQKEVOL	120
Dd	61	ILGIQGSFPLTKGSGSKLNDPADSRKSLMDGCSMTIINKLKLTIEDPTIICEVKNKEVEL	120
Qy	121	LVFGLTANSDPTLLHLOQSGLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDG	180
Dd	121	LVEGLTANSDPTLLHLEQSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDG	180
Qy	181	TWTCYVLQONKKVEFIDIVLAFQASIVYKKEGEQERSPLAFTVEKLTGSGELMW	240
Dd	181	TWTCYVLQONKKVEFIDIVLAFQASIVYKKEGEQERSPLAFTVEKLTGSGELMW	240
Qy	241	QAERASSSKSMITFDLKNKEVSKRTQDPKLOMGKKPLHLTLPOALPOYAGSGNLTLA	300
Dd	241	QAERASSSKSMITFDLKNKEVSKRTQDPKLOMGKKPLHLTLPOALPOYAGSGNLTLA	300
Qy	301	LEAKTKLHDEVNLVVMRATQLOKLTCEWGPISPKLMSLKLENKAKYSKREKPVW	360
Dd	301	LEAKTKLHDEVNLVVMRATQLOKLTCEWGPISPKLMSLKLENKAKYSKREKAVW	360
Qy	361	LNPEAGMOCILSDSGOVLLESNIKVLPTWSPVEP	396
Dd	361	LNPEAGMOCILSDSGOVLLESNIKVLPTWSPVQ	396
RESULT	86		
ID	AAR15149		
AC	AAR15149	standard; protein; 458 AA.	
XX			
XX	AAR15149;		
XX			
DT	25-MAR-2003	(revised)	
DT	24-FEB-1992	(first entry)	
XX			
DE	CD4 coordinate system.		
XX			
KM	Gelboilin,' fusion protein; diagnosis; AIDS.		
XX			
OS	Homo sapiens.		
XX			
PH	Key	Location/Qualifiers	
FT	Domain	1..25	
FT	Domain	/label= hydrophobic/secretory_signal	
FT	Domain	26..132	
FT	Domain	/label= first_Ig-related_domain	
FT	Domain	/note= "extracellular"	
FT	Domain	41..109	
FT	Domain	133..202	
FT	Domain	/label= second_Ig-related_domain	
FT	Domain	/note= "extracellular"	
FT	Domain	155..184	
FT	Domain	203..318	
FT	Domain	/label= third_Ig-related_domain	
FT	Domain	/note= "extracellular"	
FT	Domain	319..395	
FT	Domain	/label= fourth_Ig-related_domain	
FT	Domain	/note= "extracellular"	
FT	Domain	328..416	
FT	Domain	396..416	
FT	Domain	/label= hydrophobic/transmembrane_sequence	
FT	Domain	417..458	
FT	Domain	/label= very_hydrophilic/intracytoplasmic	
XX			
FN	W09117170-A.		
XX			
PD	14-NOV-1991.		
XX			
PF	04-MAY-1990;	90US-00520368.	
XX			
RR	04-MAY-1990;	90US-00520368.	
XX			
PA	(BIOJ) BIOGEN INC.		

PI	Pepinsky RB, Rosa MD, Scosese TP;
XX	
DR	WPI, 1991-353711/48.
XX	N-PsDB; AAQ14931.
PR	New multi-metric and hetero-multi-metric gelsolin fusion constructs - used
PT	to treat and diagnose AIDS, ARC and HIV infection.
PS	Disclosure; Fig 3A-3D, 131pp; English.
XX	
CC	The CD4 polypeptides useful in the constructs include all CD4
CC	polypeptides which bind to or otherwise inhibit gp120 and gp160. These
CC	include fragments lacking the transmembrane domain. In particular it is
CC	CD4 1-111; 1-Cys111; 1-Cys180; 1-181; 1-183; 1-187; 1-345 or 1-375 (from
CC	mature protein). See also AAQ14931-35 and AAR15151. (Updated on 25-MAR-
CC	2003 to correct PA field.)
XX	
SQ	Sequence 458 AA;
Query Match	56.5%; Score 1930; DB 2; Length 458;
Best Local Similarity	94.9%; Pred. No. 1.5e-97;
Matches	376; Conservative 8; Mismatches 12; Indels 0; Gaps 0;
OY	1 MNRGVPFRHLILVLTQLALLPAATOGKNKVLGGKGDTVELTCTASOKKSIOFHWKNSNOIK 60
Db	1 MNRGVPPFRHLLLVLTQLALLPAATOGKKVVGKGDVELTCTASOKKSIOFHWKNSNOIK 60
OY	ILGNQGSFLTGSPSKLNDRADRSRLMDQGNPILIINKLKIEDSDPTYCEVEDOKEEYOL 120
Db	61 ILGNQGSFLTGSPSKLNDRADRSRLMDQGNPILIINKLKIEDSDPTYCEVEDOKEEYOL 120
OY	121 LVFGITANSDDLTLQGOSLTLTLESPPSSPSVOCRSPRGKNIQGGKTLVSQLELODSG 180
Db	121 LVFGITACEDVDVEGERVSLTLERGGSSPSVQCRRSPRGKNIQGGKTLVSQLELODSG 180
OY	181 TWTCVTVNQONCKRPFKIDIVLAFOKASSIYYKKEGEVEERSPLAFVFKLTGSGELMW 240
Db	181 TWTCVTVNQONCKRPFKIDIVLAFOKASSIYYKKEGEVEERSPLAFVFKLTGSGELMW 240
OY	241 QAERASSSKSWITPDLNKKEVSVRKVDPKLQMGKLPMLTLTPALPOYAGSGLTLTA 300
Db	241 QAERASSSKSWITPDLNKKEVSVRKVDPKLQMGKLPMLTLTPALPOYAGSGLTLTA 300
OY	301 LEATGKLGHOEVNLVMRAIOLQNNLTCEVWGPTSPKLMLSLKLENKAATVSKREKPVW 360
Db	301 LEATGKLGHOEVNLVMRAIOLQNNLTCEVWGPTSPKLMLSLKLENKAATVSKREKAVW 360
OY	361 LNPEAGMMQCLLSDSGOVLTESNKKVLPWTSTPVEP 396
Db	361 LNPEAGMMQCLLSDSGOVLTESNIKVKRTMTSTPVP 396
RESULT 87	
AAR41042	
ID	AAR41042 standard; protein; 729 AA.
AC	AAR41042;
XX	
DT	24-OCT-2003 (revised)
DT	25-MAR-2003 (revised)
DT	22-MAR-1994 (first entry)
XX	
DE	CD4-GBPB fusion protein.
XX	
KM	Merozoite; glycoporin Binding Protein homologue; malaria; HIV; env;
KM	human immunodeficiency virus; envelope glycoprotein; hybrid protein;
KM	red blood cell; erythrocyte; AIDS.
XX	
OS	Homo sapiens.
OS	Plasmodium falciparum.
OS	Chimeric.
XX	
FH	Key Location/Qualifiers


```

FT Region 1..371
FT /note="residues 1-371 of CD4"
FT Region 372..729
FT /note="residues 70-427 of GBPH"
XX
XX MO9318160-A1.
XX
XX 16-SEP-1993.
XX
XX 10-MAR-1993; 93WO-GB000505.
XX
XX 11-MAR-1992; 92GB-00005276.
XX 08-JUL-1992; 92GB-0001481.
XX 24-JUL-1992; 92GB-00015829.
XX 16-SEP-1992; 92GB-0001562.
XX 03-MAR-1993; 93GB-00004311.
XX
XX (PREN/) PRENDERGAST K F.
XX
XX Prendergast KF;
XX
XX WPI; 1993-303474/38.
XX
XX Anti-viral fusion peptide(s) - comprise viral-binding component and
XX malaria merozoite red cell binding component, for creating e.g. HIV, and
XX hepatitis.
XX
XX Claim 7; Page 40-41; 69pp; English.
XX
XX The hybrid protein NH2-CD4(1-371)-GBPH(70-427)-COOH is a specifically
XX claimed example of a fusion protein of the invention; it comprises at
XX least part of the CD4 molecule fused to a peptide from a malarial
XX parasite merozoite protein with affinity for red blood cells. The fusion
XX protein can bind free HIV in the blood to red blood cells and
XX consequently reduce viral titre, prevent transmission of the virus and
XX improve safety of blood transfusions. (Updated on 25-MAR-2003 to correct
XX PN field.) (Updated on 24-OCT-2003 to standardise OS field)
XX
XX Sequence 729 AA;
XX
XX Query Match 56.5%; Score 1928.5; DB 2; Length 729;
XX Best Local Similarity 63.6%; Pred. No. 3e-97;
XX Matches 435; Conservative 34; Mismatches 98; Indels 117; Gaps 19;
XX
XX 24 OGNKVVLGKGGDPVELTCTASOKKSTIQFMKNSNOIKILGNGSPFTKGPSTLNDPDSR 83
XX 1 OGNKVVLGKGGDPVELTCTASOKKSTIQFMKNSNOIKILGNGSPFTKGPSTLNDPDSR 60
XX
XX 84 RSLMDQGNFPLIINKLKIEDSDTYICEVEDOKEVQLVFGLTANSSTHLQGSILTLTL 143
XX 61 RSLMDQGNFPLIINKLKIEDSDTYICEVEDOKEVQLVFGLTANSSTHLQGSILTLTL 120
XX
XX 144 EEPGSSPSVOCSPRGKNIQGGKITLSVQLLEQDSGTWCTVLONQKVEFKIDIVLA 203
XX 121 EEPGSSPSVOCSPRGKNIQGGKITLSVQLLEQDSGTWCTVLONQKVEFKIDIVLA 180
XX
XX 204 FOKASSIVYKKEGEVSEFSPPLAFVTEKLTGSGELMOMERASSSSSWTTPPLKXKEVSV 263
XX 181 FOKASSIVYKKEGEVSEFSPPLAFVTEKLTGSGELMOMERASSSSSWTTPPLKXKEVSV 240
XX
XX 264 KSVTDOPKLONGKULPLHLTLPOALPQVAGSGLTLALBAKQKGLHGVNLVVMRATOLQ 323
XX 241 KSVTDOPKLONGKULPLHLTLPOALPQVAGSGLTLALBAKQKGLHGVNLVVMRATOLQ 300
XX
XX 324 KVLTCGVWGPSTPKMLSLKLNKEAKVSKREKPVWNLPEAGMOCCLISDSGOVLLESN 383
XX 301 KVLTCGVWGPSTPKMLSLKLNKEAKVSKREKPVWNLPEAGMOCCLISDSGOVLLESN 360
XX
XX 384 IKVLPTWSTPV-----EPKSCDTHTCPCPCPAPELLGGSVFLFPKX 425
XX 361 IKVLPTWSTPVSOYKOADYSFRESRVLAEGSKTSKN-----AKTAL-----RK 405
XX
XX 426 PKDTLMISRTPEVTCVVVDVSHEDPEVKENWYVDGVEVNAKTKPREEOYNST----- 478

```

```

DB 406 TKQITLTSADPEGQ--IMKAWAADPEYRKHLNVLYQIINN--TDPNDLETSADPEGQIM 461
QY 479 -----YRVSVLTVHODMLNGEKYCKKSKNSALPAPIEKTSKAKGOREQVYTL 530
DB 462 KAYAADPEYR--KHLNVLYQ--ILNNTDPNDEVESSADP--EGQIMKA-----YAA 506
QY 531 PPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGOPEN-----NYKTPPEVL----- 577
DB 507 DP---EYRKHVNVLYQIINNTPDND---ELETSADPEGQIMKAYAADPEYRKHVNVLYQI 560
QY 578 --DSDGSFFLYSKLTVDXSRWQGNVFSK-----SYMHEALNNHYTQKSLISLP 624
DB 561 LNHDTSS-----EVEITSADPEGQIMKAYAADPEYRKHVNVLYQIL--NHDTSSSV----- 608
QY 625 GLQDETCAEAQDGEIDGLMTTDP 648
DB 609 -----ETSAD--PEGQIMKAYAADP 626

RESULT 88
AAP90833
ID AAP90833 standard; protein; 384 AA.
XX
XX AAP90833;
XX
XX 25-MAR-2003 (revised)
XX 01-AUG-1990 (first entry)
XX
XX Amino acid sequence of a soluble T4-like (874) polypeptide encoded by a
XX portion of clone p199-7 (PL mutet.r874).
XX
XX HIV: immunotherapeutic; prophylactic; soluble T4-like polypeptide;
XX diagnostic; p199-7 (PL mutet.r874).
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX FT Misc-difference 10 /note="initiating Met"
XX
XX PN WO8901940-A.
XX
XX PD 09-MAR-1989.
XX
XX PF 01-SEP-1988; 88WO-US002940.
XX
XX PR 04-SEP-1987; 87US-00094322.
XX 07-JAN-1988; 88US-00141649.
XX
XX PA (BIOG ) BIOGEN INC.
XX
XX PI Fisher RA, Gilbert W, Sato VL, Flavell RA, Maraganore JM;
XX DR WPI; 1989-085519/11.
XX DR N-PSDB; AAN90643.
XX
XX PT DNA sequences coding for soluble T4-like polypeptide(s) - used in
XX PT immuno;therapeutic and immunosuppressive compns. and for preventing,
XX PT treating or detecting AIDS.
XX PS Disclosure; Page 7; 207pp; English.
XX
XX CC It is the protein sequence encoded by the r874 sequence. It is claimed in
XX CC the patent. It is useful in immunotherapeutic, prophylactic and
XX CC diagnostic compns. It can be used to purify HIV from a sample. (Updated
XX CC on 25-MAR-2003 to correct PR field.)
XX
XX SQ Sequence 384 AA;
XX
XX Query Match 56.2%; Score 1917; DB 1; Length 384;
XX Best Local Similarity 99.5%; Pred. No. 6.5e-97;
XX Matches 371; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

```

Oy 24 QGNKRVLGKGGDTVELTCTASQKSIQPHMKNNSQIKILGNQGSFLLTKGPKLNDRADSR 83
Db 11 QGNKRVLGKGGDTVELTCTASQKSIQPHMKNNSQIKILGNQGSFLLTKGPKLNDRADSR 70
Oy 84 RSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQLLVFGLTANSPTHLIQGSLTTL 143
Db 71 RSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQLLVFGLTANSPTHLIQGSLTTL 130
Oy 144 ESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLQONKVEFKIDIVLA 203
Db 131 ESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLQONKVEFKIDIVLA 190
Oy 204 FOKASSIVYKKEGQVEFSPLAFTVEKLTGSGELMWQAEARASSKSWITFDLNKKEVS 263
Db 191 FOKASSIVYKKEGQVEFSPLAFTVEKLTGSGELMWQAEARASSKSWITFDLNKKEVS 250
Oy 264 KRVTDPRKLGKGLPHLTLPLQALPYAGSGNLTLEAKTGKLGHOEVLVVMRATOLQ 323
Db 251 KRVTDPRKLGKGLPHLTLPLQALPYAGSGNLTLEAKTGKLGHOEVLVVMRATOLQ 310
Oy 324 KNLTCVWGPSPKMLSLKLENKEAVSKREKPVWVLNPEAGMQCLLSDSGVLLSESN 383
Db 311 KNLTCVWGPSPKMLSLKLENKEAVSKREKPVWVLNPEAGMQCLLSDSGVLLSESN 370
Oy 384 IKVLPWTSTPVEP 396
Db 371 IKVLPWTSTPVO 383

RESULT 89
AAR41041
ID AAR41041 standard; protein; 942 AA.
XX
AC AAR41041;
XX
DT 24-OCT-2003 (revised)
DT 25-MAR-2003 (revised)
DT 22-MAR-1994 (first entry)
XX
DE CD4-GBP130 fusion protein.
XX
KW Merozoite; Glycophorin Binding Protein 130; malaria; HIV; env;
KW human immunodeficiency virus; envelope glycoprotein; hybrid protein;
KW red blood cell; erythrocyte; AIDS.
XX
OS Homo sapiens.
OS Plasmodium falciparum.
OS Chimeric.
XX
FH Key Location/Qualifiers
FT 1..371
FT Region /note="residues 1-371 of CD4"
FT 372..942
FT /note="residues 201-774 of GBP130"
XX
PN MO9318160-A1.
XX
PD 16-SEP-1993.
XX
PF 10-MAR-1993; 93WO-GB000505.
XX
PR 11-MAR-1992; 92GB-00005276.
PR 08-JUL-1992; 92GB-00014481.
PR 24-JUL-1992; 92GB-00015829.
PR 16-SEP-1992; 92GB-00019562.
PR 03-MAR-1993; 93GB-00004311.
XX
PA (PREN/) PRENDERGAST K F.
XX
PI Prendergast KF;
XX
DR WPI, 1993-303474/38.

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XX
PT Anti-viral fusion peptide(s) - comprise viral-binding component and
PT malaria merozoite red cell binding component, for treating e.g. HIV, and
PT hepatitis.
XX
PS Claim 2; Page 35-37; 69pp; English.
XX
CC The hybrid protein NH2-CD4(1-371)-GBP130(201-774)-COOH is a specifically
CC claimed example of a fusion protein of the invention; it comprises at
CC least part of the CD4 molecule fused to a peptide from a malarial
CC parasite merozoite protein with affinity for red blood cells. The fusion
CC protein can bind free HIV in the blood to red blood cells and
CC consequently reduce viral titre, prevent transmission of the virus and
CC improve safety of blood transfusions. (Updated on 25-MAR-2003 to correct
CC PN field.) (Updated on 24-OCT-2003 to standardise OS field)
XX
SQ Sequence 942 AA:
Query Match 56.1%; Score 1915; DB 2; Length 942;
Best Local Similarity 97.6%; Pred. No. 2.2e-96;
Matches 372; Conservative 1; Mismatches 8; Indels 0; Gaps 0;
Oy 24 QGNKRVLGKGGDTVELTCTASQKSIQPHMKNNSQIKILGNQGSFLLTKGPKLNDRADSR 83
Db 1 QGNKRVLGKGGDTVELTCTASQKSIQPHMKNNSQIKILGNQGSFLLTKGPKLNDRADSR 60
Oy 84 RSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQLLVFGLTANSPTHLIQGSLTTL 143
Db 61 RSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQLLVFGLTANSPTHLIQGSLTTL 120
Oy 144 ESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLQONKVEFKIDIVLA 203
Db 121 ESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLQONKVEFKIDIVLA 180
Oy 204 FOKASSIVYKKEGQVEFSPLAFTVEKLTGSGELMWQAEARASSKSWITFDLNKKEVS 263
Db 181 FOKASSIVYKKEGQVEFSPLAFTVEKLTGSGELMWQAEARASSKSWITFDLNKKEVS 240
Oy 264 KRVTDPRKLGKGLPHLTLPLQALPYAGSGNLTLEAKTGKLGHOEVLVVMRATOLQ 323
Db 241 KRVTDPRKLGKGLPHLTLPLQALPYAGSGNLTLEAKTGKLGHOEVLVVMRATOLQ 300
Oy 324 KNLTCVWGPSPKMLSLKLENKEAVSKREKPVWVLNPEAGMQCLLSDSGVLLSESN 383
Db 301 KNLTCVWGPSPKMLSLKLENKEAVSKREKPVWVLNPEAGMQCLLSDSGVLLSESN 360
Oy 384 IKVLPWTSTPVEPKSCDKTH 404
Db 361 IKVLPWTSTPVSKPSTSTRS 381

RESULT 90
AAR41043
ID AAR41043 standard; protein; 1786 AA.
XX
AC AAR41043;
XX
DT 24-OCT-2003 (revised)
DT 25-MAR-2003 (revised)
DT 22-MAR-1994 (first entry)
XX
DE CD4-EBA175 fusion protein.
XX
KW Merozoite; Erythrocyte Binding Antigen 175; malaria; HIV; env;
KW human immunodeficiency virus; envelope glycoprotein; hybrid protein;
KW red blood cell; erythrocyte; AIDS; molecular machine.
XX
OS Homo sapiens.
OS Plasmodium falciparum.
OS Chimeric.
XX
FH Key Location/Qualifiers
FT 1..371
FT Region

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FT		/note= "residues 1-371 of CD4"
FT	Region	372..1786
FT		/note= "residues 20-1435 of EBA-175"
XX	MO9318160-A1.	
XX	16-SEP-1993.	
XX	10-MAR-1993;	93WO-GB000505.
XX	PR	11-MAR-1992; 92GB-00005276.
XX	PR	08-JUL-1992; 92GB-00014481.
XX	PR	24-JUL-1992; 92GB-00015829.
XX	PR	16-SEP-1992; 92GB-00019562.
XX	PR	03-MAR-1993; 93GB-00004311.
PA	(PREN/) PRENDERGAST K F.	
XX	Pendergaest KF;	
XX	PI	WPI, 1993-303474/38.
XX	DR	
XX	PT	Anti-viral fusion peptide(s) - comprise viral-binding component and
XX	PT	malaria mezozyote red cell binding component, for treating e.g. HIV, and
XX	PT	hepatitis.
XX	PS	Claim 9; Page 44-47; 6pp; English.
XX	CC	The hybrid protein NH2-CD4(1-371)-EBA175(20-1435)-COOH is a specifically
XX	CC	claimed example of a fusion protein of the invention; it comprises at
XX	CC	least part of the CD4 molecule fused to a peptide from a malarial
XX	CC	parasite merocyte protein with affinity for red blood cells. The fusion
XX	CC	protein can bind free HIV in the blood to red blood cells and
XX	CC	consequently reduce viral titre, prevent transmission of the virus and
XX	CC	improve safety of blood transfusions. (Updated on 25-MAR-2003 to correct
XX	CC	PN field.) (Updated on 24-OCT-2003 to standardise OS field)
XX	SQ	Sequence 1786 AA;
Query Match	56.0%; Score 1911; DB 2; Length 1786;	
Best Local Similarity	98.7%; Pred. No. 76-96; 2; Indels 0; Gaps 0;	
Matches 370; Conservative 3; Mismatches		
OY	24	OGNKVVLGGKGDVELTCTASQKSIOFHMKNSNOIKILGNQGSFLTKGPSKLANDRADS 83
DB	1	OGNKVVLGGKGDVELTCTASQKSIOFHMKNSNOIKILGNQGSFLTKGPSKLANDRADS 60
OY	84	RSLMDQGNFPLIIKNLIKIEDSDTYICEVEDQEEVQLLVFGILTANSDFHLLOQSGLTLTL 143
DB	61	RSLMDQGNFPLIIKNLIKIEDSDTYICEVEDQEEVQLLVFGILTANSDFHLLOQSGLTLTL 120
OY	144	ESPPSSSPSVQCRSRGRKNIQGSKTLSVQLDLOSGMTCTCVLONOKKVEEKIDIVLA 203
DB	121	ESPSSSPSVQCRSRGRKNIQGSKTLSVQLDLOSGMTCTCVLONOKKVEEKIDIVLA 180
OY	204	FQKASSIYVKKEGEQVFESFPPLAFVYEKLTSGSELMMOERASSSSKSNITFDLKREYSV 263
DB	101	FQKASSIYVKKEGEQVFESFPPLAFVYEKLTSGSELMMOERASSSSKSNITFDLKREYSV 240
OY	264	KRVTDPKLQWKMKLPLHITLPQALPQYAGSNTLTALEAKTGKLHOEVNLVVMRATOLQ 323
DB	241	KRVTDPKLQWKMKLPLHITLPQALPQYAGSNTLTALEAKTGKLHOEVNLVVMRATOLQ 300
OY	324	KULTEWNGPSPKMLMSIKLENKAQVSRRKRPVVNLNPEAGMOCLLDSGOYLLESN 383
DB	301	KULTEWNGPSPKMLMSIKLENKAQVSRRKRAVAVNLNPEAGMOCLLDSGOYLLESN 360
OY	384	IKVLFPTWSPTVPKPS 398
DB	361	IKVLFPTWSPTVPKRN 375

Query Match	55.8%	Score 1904	DB 1	Length 434
Best Local Similarity	99.7%	Pred. No. 3,8e-96		
Matches 369	Conservative 0	Mismatches 1	Indels 0	Gaps 0
24	QGNKVVLLGKKGDVVELTCTA	SOKKSIORHMKNSNOIKILNQSGFLTKGPKNDRA	DSR 83	
56	QGNKVVLLGKKGDVVELTCTA	SOKKSIORHMKNSNOIKILNQSGFLTKGPKNDRA	DSR 115	
84	RSIMDQGNFPLIIKNIKIDSDPTV	CEVEDOKEEYQLVFGLTANSPTHLLOQGSFLTL	143	
116	RSIMDQGNFPLIIKNIKIDSDPTV	CEVEDOKEEYQLVFGLTANSPTHLLOQGSFLTL	175	
144	ESPPGSSPSVQCRSPRGKNI	IQGAKTLVSOELQDSGTWCTVLQNKVEPKIDIVLA	203	
176	ESPPGSSPSVQCRSPRGKNI	IQGAKTLVSOELQDSGTWCTVLQNKVEPKIDIVLA	235	
204	FOQASSIVYKKGEQVEFSFPLA	TFVVEKLTGSGELIMQAEPAASSKSWITFDLKNKESV	263	
236	FOQASSIVYKKGEQVEFSFPLA	TFVVEKLTGSGELIMQAEPAASSKSWITFDLKNKESV	295	
264	KRTTOPPKIQMGKKPLHLTL	POALPOYAGSGNLTIALAETGGLHDEVLLVVMRATOLQ	323	
296	KRTTOPPKIQMGKKPLHLTL	POALPOYAGSGNLTIALAETGGLHDEVLLVVMRATOLQ	355	
324	KNTLCEWAGTSPKMLSLKLENKEAVS	KKEKPVVYLINPEAGMOCILSDSGVLLSEN	383	

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Db      356 KNLTCGEVWGPTSPKMLSLKLENKEAKVSKREKAVVWLNPEAGMWQCLLSDSGVLLSESN 415
Qy      384 IKVLPTWSTP 393
      |||||
Db      416 IKVLPTWSTP 425

RESULT 92
AAP93557
ID      AAP93557 standard; protein; 434 AA.
XX
XX      AAP93557;
AC      AAP93557;
XX
XX      25-MAR-2003 (revised)
DT      03-OCT-2002 (revised)
DT      06-JUN-1990 (first entry)
XX
DE      Fusion of the herpes gD leader and N-terminal 27 residues to mature N-
DE      terminus of CD4T.
XX
XX      Adheson variant; CD4T; soluble CD4; truncated CD4; antiviral; HIV;
XX      herpes gD; immunomodulatory; diagnostic.
XX
XX      Homo sapiens.
OS
XX      WO8902922-A.
XX      06-APR-1989.
XX
XX      03-OCT-1988; 88WO-US003414.
XX
XX      02-OCT-1987; 87US-00104329.
XX      28-SEP-1988; 88US-00250785.
XX
XX      (GETH ) GENENTECH INC.
XX
XX      Capon DJ, Gregory TJ;
XX      WPI, 1989-114397/15.
XX      N-PSDB; AAN90735.
XX
XX      New nucleic acid sequences encoding adheson, esp. CD 4, variants -
XX      paritic, with trans-membrane domain inactivated or fused to other peptide,
XX      useful esp. for treating HIV infections.
XX
XX      Fig 2A-2C; pp. 5/13-8/13; 78pp; English.
XX
XX      CD4T is a truncated or soluble variant of CD4. CD4T fusion proteins can
XX      have antiviral and immunomodulatory activity and are esp. useful for
XX      treating HIV infections, regardless of genetic variation within the
XX      virus. CD4T fusion proteins, and antibodies raised against them, can also
XX      be used diagnostically for assaying adhesons and their ligands. (Updated
XX      on 03-OCT-2003 to add missing OS field.) (Updated on 25-MAR-2003 to
XX      correct PR field.) (Updated on 25-MAR-2003 to correct PA field.)
XX
XX      Sequence 434 AA;
SQ

Query Match      55.8%; Score 1904; DB 1; Length 434;
Best Local Similarity 99.7%; Pred. No. 3.8e-96;
Matches 369; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
Qy      204 FOXASSIVYKKEGEVGFSEPLAFTVEKLTGSGELMWQAERASSSKSMITFDLKNKEVS 263
Db      236 FOXASSIVYKKEGEVGFSEPLAFTVEKLTGSGELMWQAERASSSKSMITFDLKNKEVS 295
Qy      264 KRYVQDPKLGKGLPLHLTLPLQALPOLYAGSGNITLLEAKTGLHGEVNLVYMRATQL 323
Db      296 KRYVQDPKLGKGLPLHLTLPLQALPOLYAGSGNITLLEAKTGLHGEVNLVYMRATQL 355
Qy      324 KNLTCGEVWGPTSPKMLSLKLENKEAKVSKREKAVVWLNPEAGMWQCLLSDSGVLLSESN 383
Db      356 KNLTCGEVWGPTSPKMLSLKLENKEAKVSKREKAVVWLNPEAGMWQCLLSDSGVLLSESN 415
Qy      384 IKVLPTWSTP 393
Db      416 IKVLPTWSTP 425

RESULT 93
AAR07721
ID      AAR07721 standard; protein; 375 AA.
XX
XX      AAR07721;
AC      AAR07721;
XX
XX      25-MAR-2003 (revised)
DT      18-FEB-1991 (first entry)
XX
XX      Recombinant soluble (rs) T4.
XX
XX      Metal-binding site.
XX
XX      Homo sapiens.
OS
XX      WO9012803-A.
XX      01-NOV-1990.
XX
XX      14-APR-1989; 89US-00338991.
XX
XX      14-APR-1989; 89US-00338991.
XX
XX      14-APR-1989; 89US-00338991.
XX
XX      (BIOJ ) BIOGEN INC.
XX      (BIOJ ) BIOGEN INC.
XX      Staples MA, Pargellis CA;
XX
XX      WPI; 1990-348421/46.
XX
XX      Purifying protein having surface metal-binding amino acid residues -
XX      FT using an immobilised metal affinity chromatography resin.
XX
XX      Disclosure; Fig 2; 36pp; E.
XX
XX      The rs T4 can be purified from a crude sample (Updated on 25-MAR-2003 to
XX      correct PA field.)
XX
XX      Sequence 375 AA;
SQ

Query Match      55.7%; Score 1903; DB 2; Length 375;
Best Local Similarity 99.2%; Pred. No. 3.7e-96;
Matches 368; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```

QY 206 KASSIVYKKEGEQVEFSFPLAFTVEKLTGSGELMWQAERASSKSNITFDLKNKEVSVKR 265
XX |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
DB 181 KASSIVYKKEGEQVEFSFPLAFTVQKLTGSGELMWQAERASSKSNITFDLKNKEVSVKR 240
QY 266 VTQDPKLTQMGKKLPRLHLTPQALPOYAGSGNLTLEAKTGKHOEVNLVWMRATOLQKN 325
XX |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
DB 241 VTQDPKLTQMGKKLPRLHLTPQALPOYAGSGNLTLEAKTGKHOEVNLVWMRATOLQKN 300
QY 326 LTCEVWGPTSPKMLSLKLENKEAKVSKREKPYVWLNPEAGMOCCLSDSGQVLTLESNIK 385
XX |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
DB 301 LTCEVWGPTSPKMLSLKLENKEAKVSKREKAVWLNPEAGMOCCLSDSGQVLTLESNIK 360
QY 386 VLPTWSTPVEP 396
XX |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
DB 361 VLPTWSTPVEP 371

RESULT 94
AAW41376 standard; peptide; 433 AA.
ID AAW41376;
AC AAW41376;
XX
XX
DT 28-MAY-1998 (first entry)
XX
XX DE Human CD4.
XX
XX Antibody; CD4; passive immunity; HIV type 1; HIV type 2; HIV infection;
KW Bimban immunodeficiency virus; SIV; AIDS; therapy; HIV gp120.
XX
XX Homo sapiens.
XX
XX MO9746697-A2.
XX
XX 11-DEC-1997.
XX
XX 03-JUN-1997; 97WO-US009449.
XX
XX
XX 03-JUN-1996; 96US-00657149.
XX
XX 28-FEB-1997; 97US-00808374.
XX
XX 02-JUN-1997; 97US-00867149.
XX
XX (UNBI-) UNITED BIOMEDICAL INC.
XX
XX Wang CY;
XX
XX WPI; 1998-042204/04.
XX
XX Antibody against complex of CD4 and chemokine receptor domain - useful
XX for prevention and treatment of human immunodeficiency virus infection.
XX
XX Disclosure; Page 122-123; 140pp; English.
XX
XX This sequence represents human CD4, and was used to isolate the antibody
XX (Ab) of the invention. The Ab, preferably a M2 or B13 Ab, has the
XX following characteristics: (a) binds rCD4; (b) binds CD4 expressing
XX cells in an immunofluorescence assay, where the binding pattern is in the
XX shape of "cap", when examined with a high resolution fluorescence
XX microscope; (c) blocks the binding of HIV glycoprotein 120 (gp120) to CD4
XX expressing cells; (d) binds CD4 expressing cells previously bound with
XX gp120; and (e) neutralises HIV primary isolates in an in vitro
XX microplaque assay at a concentration of less than 10 mu g/ml, preferably
XX at a concentration in the range of 0.01-10 mu g/ml for 50% neutralisation
XX and 0.1-35 mu g/ml for 90% neutralisation. The Ab can be used to provide
XX passive immunity to HIV in a mammal, when administered parenterally,
XX specifically all clades of HIV type 1, and from diverse primary isolates
XX of HIV type 2 and simian immunodeficiency virus (SIV). The Ab is
XX prophylactic and therapeutic for HIV infection and all stages of AIDS
XX because it prevents replicative infection of host cells both before and
XX after HIV gp120 has bound to the host cell antigen complex comprising CD4
XX on the surface of CD4 positive lymphocytes, thus it is capable of
XX preventing HIV infection and retarding the spread of the virus to
XX uninfected cells. It is also uniquely useful because it inhibits

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CC infection following binding of HIV to CD4 expressing cells
XX
XX SQ Sequence 433 AA;
XX
XX Query Match 55.7%; Score 1901; DB 2; Length 433;
XX Best Local Similarity 99.2%; Pred. No. 5,5e-96;
XX Matches 368; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
XX
QY 26 NRVVLGKKGDVTELTCTASQKKSIOFHMKNNSVOIKILNQGSFLTKGPSKLNDRADSRRS 85
XX |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
DB 1 NRVVLGKKGDVTELTCTASQKKSIOFHMKNNSVOIKILNQGSFLTKGPSKLNDRADSRRS 60
QY 86 LMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQLVEGLTANSDTHLLQGQSLTLTLES 145
XX |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
DB 61 LMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQLVEGLTANSDTHLLQGQSLTLTLES 120
QY 146 PPGSSPSVQCRRSPRKNIQGGKTLISVSOLELDSDGTWTCTVLQNKVVEFKIDIVLAFQ 205
XX |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
DB 121 PPGSSPSVQCRRSPRKNIQGGKTLISVSOLELDSDGTWTCTVLQNKVVEFKIDIVLAFQ 180
QY 206 KASSIVYKKEGEQVEFSFPLAFTVEKLTGSGELMWQAERASSKSNITFDLKNKEVSVKR 265
XX |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
DB 181 KASSIVYKKEGEQVEFSFPLAFTVEKLTGSGELMWQAERASSKSNITFDLKNKEVSVKR 240
QY 266 VTQDPKLTQMGKKLPRLHLTPQALPOYAGSGNLTLEAKTGKHOEVNLVWMRATOLQKN 325
XX |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
DB 241 VTQDPKLTQMGKKLPRLHLTPQALPOYAGSGNLTLEAKTGKHOEVNLVWMRATOLQKN 300
QY 326 LTCEVWGPTSPKMLSLKLENKEAKVSKREKPYVWLNPEAGMOCCLSDSGQVLTLESNIK 385
XX |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
DB 301 LTCEVWGPTSPKMLSLKLENKEAKVSKREKPYVWLNPEAGMOCCLSDSGQVLTLESNIK 360
QY 386 VLPTWSTPVEP 396
XX |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
DB 361 VLPTWSTPVEP 371

RESULT 95
AAW54500 standard; protein; 433 AA.
ID AAW54500;
AC AAW54500;
XX
XX
XX 25-APR-2000 (first entry)
XX
XX Amino acid sequence of the human CD4 protein.
XX
XX Human; CD4 protein; antigenic peptide; CDR2-like domain; apoptosis;
XX synecytia formation; human immune deficiency virus; HIV binding;
XX CD4-Class II interaction; immunisation; CD4 surface complex;
XX immune response; transplant rejection; autoimmune disease;
XX rheumatoid arthritis; systemic lupus erythematosus; psoriasis.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Domain 27..66
XX FT "note="CDR-2 like domain; specifically claimed in claim
XX 1"
XX
XX MO9967294-A1.
XX
XX 29-DEC-1999.
XX
XX 21-JUN-1999; 99WO-US014030.
XX
XX 20-JUN-1999; 98US-00100409.
XX
XX (UNBI-) UNITED BIOMEDICAL INC.
XX
XX Wang CY;
XX
XX WPI; 2000-160579/14.
XX

```

XX New antigenic peptide from the CDR2 domain of CD4, for immunization
PT against e.g. human immune deficiency virus.
XX
PS Claim 1; Page 70-71; 106pp; English.
XX
CC The present sequence represents the human CD4 protein. The specification
CC describes antigenic peptides derived from the CDR2-like domain of CD4
CC (amino acids 27-66 of AAY54500). These antigenic peptides present
CC neutralising receptor/co-receptor effector sites of the CDR2-like domain.
CC The peptides evoke effective antibody responses by having optimised site-
CC specificity. The induced antibodies block human immune deficiency virus
CC (HIV) binding and syncytia formation. They may also block CD4-Class II
CC interactions with other cells, deliver signals to T cells (inhibiting
CC normal CD4-mediated immunoregulatory functions) or induce apoptosis of
CC CD4 cells by simultaneous engagement of T cell receptors. Conjugates and
CC peptides containing the antigenic peptides are used for active
CC immunisation to generate antibodies against CD4 surface complexes,
CC especially to prevent binding of HIV to CD4 and thus HIV infection, but
CC also to treat undesirable immune responses such as transplant rejection,
CC or autoimmune diseases (rheumatoid arthritis, systemic lupus
CC erythematosus or psoriasis). These conjugates produce high-titre
CC antibodies which are broadly neutralising against primary isolates from
CC all classes of HIV-1 and of HIV-2. The peptides may be cyclically
CC constrained and may include a promiscuous T helper epitope that is active
CC in genetically diverse subjects
XX
SQ Sequence 433 AA;

Query Match 55.5%; Score 1896; DB 3; Length 433;
Best Local Similarity 99.2%; Pred. No. 1e-95;
Matches 367; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 27 KVLGKGGDTVELTCTASOKKSIQFHWKNSNOIKILGNQGSFLTKGSPKLNDRADSRSL 86
DB 2 KVLGKGGDTVELTCTASOKKSIQFHWKNSNOIKILGNQGSFLTKGSPKLNDRADSRSL 61
QY 87 WDQGNFPLIINKLKIEDSDTYICEVEDQKEVQLVFGLTANSPTHLLOGOSLTLTLESP 146
DB 62 WDQGNFPLIINKLKIEDSDTYICEVEDQKEVQLVFGLTANSPTHLLOGOSLTLTLESP 121
QY 147 PGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLQNGKVEFKIDIVLAFQK 206
DB 122 PGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLQNGKVEFKIDIVLAFQK 181
QY 207 ASSIVYKKEGBOVEFSPLAFVTEKLTGSGELMWQARASSSKSWITFDLNKKEVSVKRV 266
DB 182 ASSIVYKKEGBOVEFSPLAFVTEKLTGSGELMWQARASSSKSWITFDLNKKEVSVKRV 241
QY 267 TODPKLQMGKKLP.HLTLPQALPOYAGSGNLTALBAKTGKLHDEVNLYVMRATQLOKNL 326
DB 242 TODPKLQMGKKLP.HLTLPQALPOYAGSGNLTALBAKTGKLHDEVNLYVMRATQLOKNL 301
QY 327 TCEVWGPTSPKLM.LSLKENKEAKVSKREKRPVWVLANPEAGMOCILSDSGVLLLESNIKV 386
DB 302 TCEVWGPTSPKLM.LSLKENKEAKVSKREKRPVWVLANPEAGMOCILSDSGVLLLESNIKV 361
QY 387 LPTWSTPVEP 396
DB 362 LPTWSTPVEP 371

RESULT 96
AAR74222
ID AAR74222 standard; protein; 432 AA.
XX
AC AAR74222;
XX
DT 25-MAR-2003 (revised)
XX 26-NOV-1995 (first entry)
XX
DE Epitope on the primary CD4 sequence.
XX

KW Chimeric; mutant; mapping; immunodiagnostics.
XX
OS Synthetic.
XX
EN US5411861-A.
XX
PD 02-MAY-1995.
XX
PF 27-FEB-1992; 92US-00842465.
XX
PR 15-APR-1988; 88US-00181826.
XX
PA (GEO) GEN HOSPITAL CORP.
PI Seed B, Peterson A;
XX WPI; 1995-178122/23.
XX
DR Mutational analysis method for protein epitope(s) - by expressing mutant
XX PT cDNA and using negative and positive selection to identify binding loss
XX PT mutants.
PS Disclosure; Fig 2; 28pp; English.
XX
CC The sequence is that of an epitope on the primary CD4 sequence. The
CC epitope sequence can be identified by vector pIHIM. The See also
CC AAR74221. (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ Sequence 432 AA;

Query Match 55.4%; Score 1893; DB 2; Length 432;
Best Local Similarity 99.2%; Pred. No. 1.5e-95;
Matches 367; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 27 KVLGKGGDTVELTCTASOKKSIQFHWKNSNOIKILGNQGSFLTKGSPKLNDRADSRSL 86
DB 1 KVLGKGGDTVELTCTASOKKSIQFHWKNSNOIKILGNQGSFLTKGSPKLNDRADSRSL 60
QY 87 WDQGNFPLIINKLKIEDSDTYICEVEDQKEVQLVFGLTANSPTHLLOGOSLTLTLESP 146
DB 61 WDQGNFPLIINKLKIEDSDTYICEVEDQKEVQLVFGLTANSPTHLLOGOSLTLTLESP 120
QY 147 PGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLQNGKVEFKIDIVLAFQK 206
DB 121 PGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLQNGKVEFKIDIVLAFQK 180
QY 207 ASSIVYKKEGBOVEFSPLAFVTEKLTGSGELMWQARASSSKSWITFDLNKKEVSVKRV 266
DB 181 ASSIVYKKEGBOVEFSPLAFVTEKLTGSGELMWQARASSSKSWITFDLNKKEVSVKRV 240
QY 267 TODPKLQMGKKLP.HLTLPQALPOYAGSGNLTALBAKTGKLHDEVNLYVMRATQLOKNL 326
DB 241 TODPKLQMGKKLP.HLTLPQALPOYAGSGNLTALBAKTGKLHDEVNLYVMRATQLOKNL 300
QY 327 TCEVWGPTSPKLM.LSLKENKEAKVSKREKRPVWVLANPEAGMOCILSDSGVLLLESNIKV 386
DB 301 TCEVWGPTSPKLM.LSLKENKEAKVSKREKRPVWVLANPEAGMOCILSDSGVLLLESNIKV 360
QY 387 LPTWSTPVEP 396
DB 361 LPTWSTPVEP 370

RESULT 97
AAY30514
ID AAY30514 standard; protein; 432 AA.
XX
AC AAY30514;
XX
DT 15-NOV-1999 (first entry)
XX
DE Predicted sequence of the CD4 protein.
XX

KW CD4 protein; rapid mutational analysis method; protein epitope mapping;
 KW binding domain mapping; binding capacity; anti-CD2 antibody;
 KW anti-CD4 antibody; ligand binding site study.
 OS
 XX Homo sapiens.
 XX
 PN US955264-A.
 XX
 PD 21-SEP-1999.
 XX
 PF 11-OCT-1994; 94US-00320663.
 XX
 PR 15-APR-1988; 88US-00181826.
 PR 27-FEB-1992; 92US-00842465.
 XX
 PA (GEHO) GEN HOSPITAL CORP.
 XX
 PI Seed B, Peterson A;
 XX
 DR WPI; 1999-550602/46.
 XX
 PT Rapid mutational analysis method for mapping protein epitopes.
 PS
 XX Example 4; Fig 4; 27pp; English.
 PS
 CC The present sequence represents the predicted sequence of the CD4
 CC protein. The protein is used to demonstrate the method of the invention.
 CC The specification describes a rapid mutational analysis method for
 CC mapping protein epitopes and binding domains, by identifying substitution
 CC mutations that result in the loss of binding capacity. The method may be
 CC used for mapping protein epitopes, antigenic domains and binding sites.
 CC It has been used for mapping binding sites for sixteen anti-CD2 and anti-
 CC CD4 monoclonal antibodies. The method is especially useful for ligand
 CC binding site studies for the design of new ligands and drugs
 CC
 SQ Sequence 432 AA;
 Query Match 55.4%; Score 1893; DB 2; Length 432;
 Best Local Similarity 99.2%; Pred. No.1.5e-95;
 Matches 367; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 27 KVVLGKGGDTVELTCTAQQKSIQPHMKNSNOIKILGNQGSFLTQKPSKLNDRADSRSL 86
 DB 1 KVVLGKGGDTVELTCTAQQKSIQPHMKNSNOIKILGNQGSFLTQKPSKLNDRADSRSL 60
 QY 87 WDOGNFPLIIKNIKIEDSDTYICEVEDQKEEVOLLVFGLTANSDFHLLQGOSLTTLTLESP 146
 DB 61 WDOGNFPLIIKNIKIEDSDTYICEVEDQKEEVOLLVFGLTANSDFHLLQGOSLTTLTLESP 120
 QY 147 PGSSPSVOCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLOQKVEFKIDIVVLAFOK 206
 DB 121 PGSSPSVOCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLOQKVEFKIDIVVLAFOK 180
 QY 207 ASSIYVKKGEQVEFSPFLAFTVEKLTGSGELMWQAERASSSKSWITPDLKNKEYSVKRV 266
 DB 181 ASSIYVKKGEQVEFSPFLAFTVEKLTGSGELMWQAERASSSKSWITPDLKNKEYSVKRV 240
 QY 267 TQDPKLGKGGKPLHLTLPOALPOYAGSGNLTALAEAKTGKLGHOEVNLVWMRAVQLQGNL 326
 DB 241 TQDPKLGKGGKPLHLTLPOALPOYAGSGNLTALAEAKTGKLGHOEVNLVWMRAVQLQGNL 300
 QY 327 TCEVWGPSTPKMLSLKLENKEAKVSKREKPVVNLNPEAGMOCCLSDSGOVLLESNIKV 386
 DB 301 TCEVWGPSTPKMLSLKLENKEAKVSKREKPVVNLNPEAGMOCCLSDSGOVLLESNIKV 360
 QY 387 LPTWSTPVEP 396
 DB 361 LPTWSTPVEP 370

RESULT 98
 ADA25188
 ID ADA25188 standard; peptide; 432 AA.

XX AC ADA25188;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE CD4 epitope region 1.
 XX
 KW ligand binding site study; ligand design; drug design; CD4; epitope;
 KW immunogenic.
 OS
 XX Unidentified.
 XX
 FH Key Location/Qualifiers
 FT Region 34..52
 FT /note="leu3a epitope"
 FT Region 364..393
 FT /note="Transmembrane region"
 XX
 XX US6579676-B1.
 XX
 PN 17-JUN-2003.
 XX
 PD 21-SEP-1999; 99US-00400207.
 XX
 PF 15-APR-1988; 88US-00181826.
 PR 27-FEB-1992; 92US-00842465.
 PR 11-OCT-1994; 94US-00320663.
 XX
 PA (GEHO) GEN HOSPITAL CORP.
 XX
 PI Seed B, Peterson A;
 XX
 DR WPI; 2003-644358/61.
 XX
 PT New population of recombinant cells collectively comprising mutant cDNAs,
 PT useful in ligand binding site studies for the design of new ligands and
 PT drugs.
 PS
 XX Disclosure; Fig 4; 27pp; English.
 PS
 CC The invention relates to a population of recombinant cells collectively
 CC comprising mutant cDNAs comprising substitution mutants, where each
 CC mutant cDNA encodes a particular protein of interest, where the
 CC nucleotide sequence encoding the protein is known and the protein of
 CC interest comprises at least two known binding domains comprising
 CC different ligands. The population of recombinant cells collectively
 CC comprising mutant cDNAs are useful in ligand binding site studies for the
 CC design of new ligands and drugs. The present sequence represents the
 CC amino acid sequence of the CD4 epitope region 1.
 CC
 SQ Sequence 432 AA;
 Query Match 55.4%; Score 1893; DB 6; Length 432;
 Best Local Similarity 99.2%; Pred. No.1.5e-95;
 Matches 367; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 27 KVVLGKGGDTVELTCTAQQKSIQPHMKNSNOIKILGNQGSFLTQKPSKLNDRADSRSL 86
 DB 1 KVVLGKGGDTVELTCTAQQKSIQPHMKNSNOIKILGNQGSFLTQKPSKLNDRADSRSL 60
 QY 87 WDOGNFPLIIKNIKIEDSDTYICEVEDQKEEVOLLVFGLTANSDFHLLQGOSLTTLTLESP 146
 DB 61 WDOGNFPLIIKNIKIEDSDTYICEVEDQKEEVOLLVFGLTANSDFHLLQGOSLTTLTLESP 120
 QY 147 PGSSPSVOCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLOQKVEFKIDIVVLAFOK 206
 DB 121 PGSSPSVOCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLOQKVEFKIDIVVLAFOK 180
 QY 207 ASSIYVKKGEQVEFSPFLAFTVEKLTGSGELMWQAERASSSKSWITPDLKNKEYSVKRV 266
 DB 181 ASSIYVKKGEQVEFSPFLAFTVEKLTGSGELMWQAERASSSKSWITPDLKNKEYSVKRV 240
 QY 267 TQDPKLGKGGKPLHLTLPOALPOYAGSGNLTALAEAKTGKLGHOEVNLVWMRAVQLQGNL 326

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Db      241  |||||
      241  TQDPKLGKGLPHLTLTPOALPOYAGSGNLTALAEKTKLHGVNLVVMRATQLQKNL 300
Qy      327  TCEVWGPTSPKMLSLKLENKEAKVSKREKPVWVNLNPEAGMOCILSDSGVLLSENIKV 386
      301  TCEVWGPTSPKMLSLKLENKEAKVSKREKPVWVNLNPEAGMOCILSDSGVLLSENIKV 360
Qy      387  LPTWSTPVP 396
      361  LPTWSTPVP 370
Db

RESULT 99
AAV39824
ID      AAV39824 standard; protein; 369 AA.
XX
AC      AAV39824;
XX
DT      03-DEC-1999 (first entry)
XX
DE      Soluble human T4 protein.
XX
KM      Soluble T4 protein; sT4; human; HIV; binding inhibitor; T4+ cell; AIDS;
XX      vaccine; immunisation; therapy.
XX
OS      Homo sapiens.
XX
PN      US958678-A.
XX
PD      28-SEP-1999.
XX
PF      12-DEC-1994; 94US-00354452.
XX
PR      21-AUG-1986; 86US-00898587.
PR      11-JUN-1991; 91US-00713564.
PR      06-JUL-1992; 92US-00909021.
XX
PA      (UNYCO ) UNIV COLUMBIA NEW YORK.
XX
PI      McDougal JS, Weiss R, Axel R, Littman DR, Madden PJ, Chess L;
XX      WPI, 1999-561025/47.
XX
PT      Human T4 protein inhibits HIV binding to T4 cells, useful for treating
XX      AIDS.
XX
PS      Claim 1; Col 51-53; 58pp; English.
XX
CC      This sequence represents the soluble human T4 protein of the invention.
CC      The soluble human T4 protein blocks the binding of HIV to T4+ cells and
CC      is therefore useful for the treatment of AIDS. Monoclonal antibodies
CC      against the T4 protein may be used as vaccines for immunising subjects
CC      against AIDS.
XX
SQ      Sequence 369 AA;

Query Match      55.4%; Score 1891; DB 2; Length 369;
Best Local Similarity 99.7%; Pred. No. 1,6e-95;
Matches 367; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      27  KVLIGKGDVVELTCTASQKSIQFHWKNSNQIKILNGSFLTGKPSKLNDRADSRSL 86
      2  KVLIGKGDVVELTCTASQKSIQFHWKNSNQIKILNGSFLTGKPSKLNDRADSRSL 61
Db      62  WDOGFPILIKLKIEDSDTYICEVEDQKEVQLLVFGITANSDFHLIQGSLTLTLESP 121
      87  WDOGFPILIKLKIEDSDTYICEVEDQKEVQLLVFGITANSDFHLIQGSLTLTLESP 146
Qy      147  PGSSSVQCRSPRGKNIQGGKTLVSQLELQDSGTWCTVLOKKEVFKIDIVVLARQX 206
      122  PGSSSVQCRSPRGKNIQGGKTLVSQLELQDSGTWCTVLOKKEVFKIDIVVLARQX 181
Qy      207  ASSIYKKEGQVEFSPLAFTVEKLTGSGELMWQABRASSKSWITPDLNKEVSVKR 266

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Db      182  |||||
      182  ASSIYKKEGQVEFSPLAFTVEKLTGSGELMWQABRASSKSWITPDLNKEVSVKR 241
Qy      267  TQDPKLGKGLPHLTLTPOALPOYAGSGNLTALAEKTKLHGVNLVVMRATQLQKNL 326
      242  TQDPKLGKGLPHLTLTPOALPOYAGSGNLTALAEKTKLHGVNLVVMRATQLQKNL 301
Qy      327  TCEVWGPTSPKMLSLKLENKEAKVSKREKPVWVNLNPEAGMOCILSDSGVLLSENIKV 386
      302  TCEVWGPTSPKMLSLKLENKEAKVSKREKPVWVNLNPEAGMOCILSDSGVLLSENIKV 361
Qy      387  LPTWSTPVP 394
      362  LPTWSTPVP 369
Db

RESULT 100
AAV88327
ID      AAV88327 standard; protein; 369 AA.
XX
AC      AAV88327;
XX
DT      14-JUL-2000 (first entry)
XX
DE      T4 glycoprotein amino acid sequence.
XX
KM      sT4; glycoprotein; human immunodeficiency virus; HIV; block binding;
XX      AIDS; treatment; inhibit; cell to cell spread; infection; fusion.
XX
OS      Mammalia.
XX
PN      US5126433-A.
XX
PD      30-JUN-1992.
XX
PF      23-OCT-1987; 87US-00114244.
XX
PR      21-AUG-1986; 86US-00898587.
XX
PA      (UNYCO ) UNIV COLUMBIA NEW YORK.
XX
PI      Madden PJ, Chess L, Axel R, Weiss R, Littman DR, McDougal JS;
XX      WPI, 2000-348913/30.
XX
PT      Soluble T4 glycoprotein useful for prevention and treatment of acquired
XX      immunodeficiency syndrome and for screening inhibitors of human
XX      immunodeficiency viral binding.
XX
PS      Claim 1; Col 54; 64pp; English.
XX
CC      This sequence represents the amino acid sequence of glycosylated sT4
CC      glycoprotein. Human immunodeficiency virus (HIV) uses sT4 as a target
CC      receptor on T cells. The invention relates to glycosylated sT4 which
CC      functions by blocking the binding of HIV to T4 target cells, and can be
CC      used for the prophylaxis and treatment of AIDS patients. Administration
CC      of sT4 effectively inhibits the cell to cell spreading of HIV infection
CC      and also the fusion of HIV-infected T4 cells and non-infected T4 cells.
CC      The administration of T4 alleviates several symptoms associated with
CC      AIDS, and prevents the occurrence of new pathological changes. The sT4
CC      glycoprotein is useful for the prophylaxis and treatment of patients with
CC      AIDS. It is also useful as a reagent to identify natural, synthetic or
CC      recombinant molecules which act as therapeutic agents or inhibitors of
CC      T4+ cell interactions and in diagnostic assays for detection T4 proteins
CC      or molecules.
XX
SQ      Sequence 369 AA;

Query Match      55.4%; Score 1891; DB 3; Length 369;
Best Local Similarity 99.7%; Pred. No. 1,6e-95;
Matches 367; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      27  KVLIGKGDVVELTCTASQKSIQFHWKNSNQIKILNGSFLTGKPSKLNDRADSRSL 86

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Db	2	KVVLGKKGDVTELCTASQKKSIQFHWKXSNQIKILGNQGSFLTQGPSKLNDRADSRSL	61
Qy	87	WNOGNFPLIINKUKIEDSDTYICEVEDQKEVQVLVFGLTANSDBTLLOGSITLTLESP	146
Db	62	WDQGNFPLIINKUKIEDSDTYICEVEDQKEVQVLVFGLTANSDBTLLOGSITLTLESP	121
Qy	147	PGSSPSVQCRSPRGKNIQGGKTLVSQLEIODSGTWTCTVLONQKVEFKIDIVLAFQK	206
Db	122	PGSSPSVQCRSPRGKNIQGGKTLVSQLEIODSGTWTCTVLONQKVEFKIDIVLAFQK	181
Qy	207	ASSIVYKKEGEQVEFSFPLAFIVEKLTGSGELMWQAEARASSSKSWITFDLKNKEVSVKRV	266
Db	182	ASSIVYKKEGEQVEFSFPLAFIVEKLTGSGELMWQAEARASSSKSWITFDLKNKEVSVKRV	241
Qy	267	TDDPKLQMGKULPLHLTLPOALPOYAGSGLTLALEAKTGKLGHOEVNLVVMRATOLQKNL	326
Db	242	TDDPKLQMGKULPLHLTLPOALPOYAGSGLTLALEAKTGKLGHOEVNLVVMRATOLQKNL	301
Qy	327	TCEVMGPTSPKMLSLKENKEAKVSKREKPVVNLNPEAGMMOCLSDSGOVLLESNIKV	386
Db	302	TCEVMGPTSPKMLSLKENKEAKVSKREKAVVNLNPEAGMMOCLSDSGOVLLESNIKV	361
Qy	387	LPTWSTPV	394
Db	362	LPTWSTPV	369

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Job time : 74.926 secs

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OM protein - protein search, using sw model

Run on: August 3, 2004, 13:14:00 ; Search time 54.8475 Seconds
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Searched: 1291235 seqs, 313682936 residues

Total number of hits satisfying chosen parameters: 1291235

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Maximum Match 100%
Listing first 125 summaries

Database : Published Applications AA.*

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Prod. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

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5	2039	59.7	532	10	US-09-939-537-6
6	2039	59.7	532	11	US-09-243-008-6
7	2039	59.7	575	10	US-09-939-537-4
8	2039	59.7	575	11	US-09-243-008-4
9	2035	59.6	462	10	US-09-939-537-5
10	2035	59.6	462	11	US-09-243-008-5
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12	2029	59.4	398	10	US-09-939-537-29
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16	2017	59.1	402	14	US-10-097-044A-1	Sequence 1, Appli
17	2016	59.1	458	12	US-10-151-274-3	Sequence 3, Appli
18	2006	58.8	458	8	US-08-681-219-27	Sequence 27, Appli
19	2006	58.8	458	11	US-09-230-111C-25	Sequence 25, Appli
20	2006	58.8	458	14	US-10-092-138-25	Sequence 25, Appli
21	2001	58.6	397	11	US-09-891-119A-2	Sequence 2, Appli
22	1904	55.8	434	14	US-10-097-044A-4	Sequence 4, Appli
23	1891	55.4	370	9	US-09-759-841-6	Sequence 6, Appli
24	1886.5	55.3	448	14	US-10-024-329-32	Sequence 32, Appli
25	1385	40.6	254	10	US-09-939-537-33	Sequence 33, Appli
26	1351.5	39.6	617	14	US-10-363-427-18	Sequence 18, Appli
27	1351.5	39.6	617	14	US-10-363-427-22	Sequence 22, Appli
28	1320	38.7	592	9	US-09-935-868-8	Sequence 8, Appli
29	1320	38.7	592	14	US-10-287-035-8	Sequence 8, Appli
30	1320	38.7	592	14	US-10-282-162-8	Sequence 8, Appli
31	1319	38.6	543	14	US-10-207-655-345	Sequence 345, App
32	1316	38.5	492	14	US-10-207-655-344	Sequence 344, App
33	1313.5	38.5	437	14	US-10-363-427-14	Sequence 14, Appli
34	1313	38.5	504	14	US-10-207-655-348	Sequence 348, App
35	1312	38.4	594	9	US-09-815-108-22	Sequence 22, Appli
36	1312	38.4	567	14	US-10-229-584-32	Sequence 22, Appli
37	1311.5	38.4	567	12	US-09-773-877A-12	Sequence 12, Appli
38	1311.5	38.4	567	12	US-09-773-877A-20	Sequence 20, Appli
39	1306	38.3	779	10	US-09-910-600-16	Sequence 16, Appli
40	1306	38.3	779	10	US-09-910-600-30	Sequence 30, Appli
41	1304.5	38.2	557	12	US-10-412-406-32	Sequence 32, Appli
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43	1302.5	38.2	4852	12	US-10-412-406-33	Sequence 33, Appli
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45	1298.5	38.0	480	14	US-10-077-023-5	Sequence 5, Appli
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57	1288.5	37.7	499	14	US-10-207-655-15	Sequence 15, Appli
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61	1287	37.7	600	16	US-10-334-235-38	Sequence 38, Appli
62	1286.5	37.7	446	12	US-10-435-299-7	Sequence 7, Appli
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69	1284	37.6	476	9	US-09-747-669-3	Sequence 3, Appli
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73	1283	37.6	500	14	US-10-207-655-397	Sequence 397, App
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78	1281.5	37.5	497	12	US-10-683-255-6	Sequence 6, Appli
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81	1278.5	37.4	445	14	US-10-320-231A-79	Sequence 79, Appli
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88	1277.5	37.4	444	16	US-10-645-215-6	Sequence 6, Appli

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90 1277 37.4 704 14 US-10-357-653-2 Sequence 2, Appl
91 1276 37.4 476 16 US-10-660-128-12 Sequence 12, Appl
92 1275.5 37.4 387 12 US-10-050-237-4 Sequence 4, Appl
93 1275.5 37.4 453 14 US-10-159-006-18 Sequence 18, Appl
94 1275.5 37.4 475 9 US-09-740-002-25 Sequence 25, Appl
95 1275.5 37.4 475 16 US-10-325-698-25 Sequence 25, Appl
96 1275 37.3 471 15 US-10-108-260A-4285 Sequence 4285, Ap
97 1274.5 37.3 465 12 US-10-404-724-25 Sequence 25, Appl
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99 1273.5 37.3 469 16 US-10-656-769-20 Sequence 10, Appl
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102 1273 37.3 473 15 US-10-108-260A-4278 Sequence 3, Appl
103 1273 37.3 474 10 US-09-848-832-3 Sequence 1, Appl
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106 1273 37.3 502 14 US-10-363-427-24 Sequence 4, Appl
107 1272.5 37.3 448 16 US-10-467-546-4 Sequence 27, Appl
108 1272.5 37.3 475 9 US-09-740-002-27 Sequence 27, Appl
109 1272.5 37.3 475 16 US-10-325-698-27 Sequence 12, Appl
110 1271.5 37.2 442 12 US-10-226-435A-12 Sequence 117, App
111 1271.5 37.2 470 14 US-10-216-484-117 Sequence 143, App
112 1271.5 37.2 470 14 US-10-216-484-143 Sequence 117, App
113 1271.5 37.2 470 14 US-10-384-933-117 Sequence 143, App
114 1271.5 37.2 470 14 US-10-207-655-270 Sequence 15, Appl
115 1271.5 37.2 550 14 US-08-469-583A-15 Sequence 16, Appl
116 1271.5 37.2 680 8 US-09-948-018-16 Sequence 147, App
117 1271 37.2 404 9 US-10-216-484-147 Sequence 147, App
118 1270.5 37.2 470 14 US-10-384-933-147 Sequence 32, Appl
119 1270.5 37.2 541 16 US-10-471-151-32 Sequence 31, Appl
120 1270.5 37.2 558 16 US-10-471-151-31 Sequence 68, Appl
121 1270 37.2 451 10 US-09-925-179-68 Sequence 4, Appl
122 1270 37.2 451 15 US-10-433-289-4 Sequence 9, Appl
123 1270 37.2 470 14 US-10-020-786-9 Sequence 5, Appl
124 1270 37.2 470 14 US-10-227-694-5

ALIGNMENTS

RESULT 1
US-08-485-163-5
; Sequence 5, Application US/08485163
; Publication No. US20020098191A1
; GENERAL INFORMATION:
; APPLICANT: Beaudry, Gary A.
; TITLE OF INVENTION: CD4-GAMMA2 CD4-19G2 CHIMERAS
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooper & Dunham LLP
; STREET: 1185 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.24
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/485,163
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28, 678
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 278-0400

TELEFAX: (212) 391-0525
; TELEEX:
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 530 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: CDNA
; ORIGINAL SOURCE:
; ORGANISM: homo sapien
; CELL TYPE: lymphocyte
; US-08-485-163-5

Query Match 63.0%; Score 2151; DB 8; Length 530;
Best Local Similarity 70.4%; Pred. No. 6,56-143;
Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

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QY 121 LVFGLTNSDTHLLQGSLLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTNSDTHLLQGSLLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
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DB 181 TWITCTVLQNGKVEFKIDIVLAFQKASIVYKKEGQVEFPFLATVETLQSGELMW 240
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RESULT 2
US-09-766-995-4
; Sequence 4, Application US/09766995
; Patent No. US20020052481A1
; GENERAL INFORMATION:
; APPLICANT: Graham P. Allaway et al.
; TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED CD4-GAMMA2 AND CD4-19G2 IMMUNOCONJ
; FILE REFERENCE: 2048/41215-CB/JPW/SHS
; CURRENT APPLICATION NUMBER: US/09/766,995

; CURRENT FILING DATE: 2001-01-22
 ; NUMBER OF SEQ ID NOS: 9
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 4
 ; LENGTH: 530
 ; TYPE: PRT
 ; ORGANISM: homo sapiens
 ; US-09-766-995-4

Query Match 63.0%; Score 2151; DB 9; Length 530;
 Best Local Similarity 70.4%; Pred. No. 6,5e-143;
 Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

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DB 293 P-----SNTKYDKT-----VERKCCVE---CPPCPAPP-VAG 320
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RESULT 3
 US-08-485-163-3 Application US/08485163
 ; Sequence 3, Applcation No. US20020098191A1
 ; Publication No. US20020098191A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Beauty, Gary A.
 ; APPLICANT: Maddon, Paul J.
 ; TITLE OF INVENTION: CD4-GAMMA2 CD4-IGG2 CHIMERAS
 ; NUMBER OF SEQUENCES: 10
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Cooper & Dunham LLP
 ; STREET: 1185 Avenue of the Americas
 ; CITY: New York
 ; STATE: New York
 ; COUNTRY: USA

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; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.24
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/485,163
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 37690-II-1-PCT-US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 278-0400
; TELEFAX: (212) 391-0525
;
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 432 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: homo sapien
; CELL TYPE: lymphocyte
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; US-08-485-163-3

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Query Match 60.8%; Score 2077; DB 8; Length 432;
 Best Local Similarity 66.1%; Pred. No. 8e-138;
 Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

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QY 601 VFSCVMBEALHNHYTOKSLSPG 625
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RESULT 4

US-09-766-995-2
; Sequence 2, Application US/09766995
; Patent No. US20020052481A1
; GENERAL INFORMATION:
; APPLICANT: Graham P. Allaway et al.
; TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED CD4-GAMMA2 AND CD4-IGG2 IMMUNOCONJUGATES
; FILE REFERENCE: 2048/41215-CB/JPM/SHS
; CURRENT APPLICATION NUMBER: US/09/766,995
; CURRENT FILING DATE: 2001-01-22
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
; LENGTH: 432
; TYPE: PRT
; ORGANISM: homo sapiens
US-09-766-995-2

Query Match 60.8%; Score 2077; DB 9; Length 432;
Best Local Similarity 66.1%; Pred. No. 8e-138;
Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

QY 1 MNRGVPFRHLLVLTALPAATGKNRVVLGKGGDTVELTCTASQKSIQFHMKNNSQIK 60
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QY 181 TWCTVLTQNOKKVEFKIDIVLAFQKASSIYKKKEGBOVESPLAFTVEKLTGSGELMW 240
DB 181 TWCTVLTQNOKKVEFKIDIVLAFQKASSIYKKKEGBOVESPLAFTVEKLTGSGELMW 240
QY 241 QAERASSKSWITPDLKQKKEVSVKKVTQPKLQWKKLPIHLTLPLQALPOYAGSGNLTLA 300
DB 207 ----- 206
QY 301 LEAKTGKLEHVNVLVVRATOLQKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPYVW 360
DB 207 ----- 206
QY 361 LNPEAGMOCCLSDSGQVLEBSNIVLPTWSTPVEPKSCDKTHHTCPCPAPBELLGPGSVF 420
DB 207 -----KCCV-----CPGPAAPVAGPSVF 226
QY 421 LFPKPKDTLMTSRTPBVTQVVDVSHEDPEYKFMWYDGVVNAKTRPREBOYNSYR 480
DB 227 LFPKPKDTLMTSRTPBVTQVVDVSHEDPEYKFMWYDGVVNAKTRPREBOYNSYR 480
QY 481 VVSVLTVLHODVLNKEKYEKCKVSNKALPAPLEKTISSAKGQPREPOVYTLPPSRDELTKN 540
DB 287 VVSVLTVLHODVLNKEKYEKCKVSNKALPAPLEKTISSAKGQPREPOVYTLPPSRDELTKN 540
QY 541 QVSLTCLVKGFPSPDIAMVWBSNGOPENNYYKTPPVLDSDGSPFLYSKLTVDKSRMOQGN 600
DB 347 QVSLTCLVKGFPSPDIAMVWBSNGOPENNYYKTPPVLDSDGSPFLYSKLTVDKSRMOQGN 600
QY 601 VFSCVMBEALHNHYTOKSLSPG 625
DB 407 VFSCVMBEALHNHYTOKSLSPG 431

RESULT 5

US-09-939-537-6
; Sequence 6, Application US/09939537
; Publication No. US20030138410A1
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; Banapour, Babak
; Romeo, Charles
; Kolanus, Waldemar

TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED CELLS BY CHIMERIC CD4 RECEPTOR-BEARING CELLS

NUMBER OF SEQUENCES: 53
CORRESPONDENCE ADDRESS:
ADDRESSEE: Clark & Elbing LLP
STREET: 176 Federal Street
CITY: Boston
STATE: MA

COUNTRY: USA
ZIP: 02110

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS

SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/939,537
FILING DATE: 24-Aug-2001

CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/284,391
FILING DATE: 02-AUG-1994
APPLICATION NUMBER: 08/195,395
FILING DATE: 14-FEB-1994
APPLICATION NUMBER: 07/847,566
FILING DATE: 06-MAR-1992
APPLICATION NUMBER: 07/665,961
FILING DATE: 07-MAR-1991

ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L.
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/247001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045
TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 532 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 6:

US-09-939-537-6
Query Match 59.7%; Score 2039; DB 10; Length 532;
Best Local Similarity 99.0%; Pred. No. 5e-135;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVPFRHLLVLTALPAATGKNRVVLGKGGDTVELTCTASQKSIQFHMKNNSQIK 60
DB 1 MNRGVPFRHLLVLTALPAATGKNRVVLGKGGDTVELTCTASQKSIQFHMKNNSQIK 60
QY 61 ILNGQSFLLTKGSPKLANDRADSRSLMDQGNFLLIKNLKIBSDTYICEVEDQKEEVQL 120
DB 61 ILNGQSFLLTKGSPKLANDRADSRSLMDQGNFLLIKNLKIBSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSPTHLQOGSLTTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSPTHLQOGSLTTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWCTVLTQNOKKVEFKIDIVLAFQKASSIYKKKEGBOVESPLAFTVEKLTGSGELMW 240

|||||
Db 181 TWTCTVLQKQKVEFIDIVLAFQKASSIYVKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
Qy 241 QAEKSSSSKSWITFDLKNKEVSVKRVTDOPKLOMGKULPLHLTLPQALPOYAGSGLTLTA 300
Db 241 QAEKSSSSKSWITFDLKNKEVSVKRVTDOPKLOMGKULPLHLTLPQALPOYAGSGLTLTA 300
Qy 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYWV 360
Db 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYWV 360
Qy 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
Db 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401

RESULT 6
US-09-243-008-6
; Sequence 6, Application US/09243008
; Publication No. US20040005334A1
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian et al.
; TITLE OF INVENTION: Redirection of Cellular Immunity by
; Receptor Chimeras
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; COMPUTER: IBM PS/2 Model 502 or 55SX
; OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
; SOFTWARE: Wordperfect (Version 5.0)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/243,008
; FILING DATE: 02-Feb-1999
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/394,176
; FILING DATE: SEPTEMBER 11, 1995
; APPLICATION NUMBER: 08/203,866
; FILING DATE: February 28, 1994
; APPLICATION NUMBER: 07/847,566
; FILING DATE: March 6, 1992
; APPLICATION NUMBER: 07/665,961
; FILING DATE: March 7, 1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Karen F. Lech, Ph.D
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/270001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 542-5070
; TELEFAX: (617) 542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 532 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 6:
US-09-243-008-6

Query Match 59.7%; Score 2039; DB 11; Length 532;
Best Local Similarity 99.0%; Pred. No. 5e-135; Indels 2; Gaps 1;
Matches 397; Conservative 1; Mismatches 1;

Qy 1 MNRGVPFRHLVLVQLALLPAATGKNVVLGKKGDTVELTCTASQKKSIOFMKNSNQIK 60
Db 1 MNRGVPFRHLVLVQLALLPAATGKNVVLGKKGDTVELTCTASQKKSIOFMKNSNQIK 60

Qy 61 ILGNQSFLLTGKPSKLANDRARSRLMPQGNFPLIKLKIEDSDTYICEVEDQKEEYQL 120
Db 61 ILGNQSFLLTGKPSKLANDRARSRLMPQGNFPLIKLKIEDSDTYICEVEDQKEEYQL 120
Qy 121 LVFGLTANSDFHLLQGGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Db 121 LVFGLTANSDFHLLQGGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Qy 181 TWTCTVLQKQKVEFKIDIVLAFQKASSIYVKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
Db 181 TWTCTVLQKQKVEFKIDIVLAFQKASSIYVKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
Qy 241 QAEKSSSSKSWITFDLKNKEVSVKRVTDOPKLOMGKULPLHLTLPQALPOYAGSGLTLTA 300
Db 241 QAEKSSSSKSWITFDLKNKEVSVKRVTDOPKLOMGKULPLHLTLPQALPOYAGSGLTLTA 300
Qy 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYWV 360
Db 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYWV 360
Qy 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
Db 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401

RESULT 7
US-09-939-537-4
; Sequence 4, Application US/09939537
; Publication No. US20030138410A1
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; Banapour, Babak
; Romeo, Charles
; Kolanue, Waldemar
; TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
; CELLS BY CHIMERIC CD4 RECEPTOR- BEARING CELLS
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: Pasteo for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/939,537
; FILING DATE: 24-Aug-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/284,391
; FILING DATE: 02-AUG-1994
; APPLICATION NUMBER: 08/195,395
; FILING DATE: 14-FEB-1994
; APPLICATION NUMBER: 07/847,566
; FILING DATE: 06-MAR-1992
; APPLICATION NUMBER: 07/665,961
; FILING DATE: 07-MAR-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Elbing, Karen L
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/247001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:

LENGTH: 575 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-939-537-4

Query Match 59.7%; Score 2039; DB 10; Length 575;
Best Local Similarity 99.0%; Pred. No. 5.5e-135;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

OY 1 MNRGVPRHLLVQLALLPAATQGNKVLGKGDVTELTCTASQKSIQFHMKNNOIK 60
DB 1 MNRGVPRHLLVQLALLPAATQGNKVLGKGDVTELTCTASQKSIQFHMKNNOIK 60
OY 61 ILNGSGFLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILNGSGFLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120
OY 121 LVFGLTANSDTHLLOQGSLLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLLOQGSLLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
OY 181 TWCTVQLONQKKEFKIDIVLAFOKASSIYKKEGEVFSPLAFTVEKLTSGGELMW 240
DB 181 TWCTVQLONQKKEFKIDIVLAFOKASSIYKKEGEVFSPLAFTVEKLTSGGELMW 240
OY 241 QAERASSKSWITPDLKNKEVSVKRVTDPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
DB 241 QAERASSKSWITPDLKNKEVSVKRVTDPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
OY 301 LEAKTGKLEHENVLVNVRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKYSKKEKPYW 360
DB 301 LEAKTGKLEHENVLVNVRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKYSKKEKPYW 360
OY 361 LNPEAGMWOCLLSDSGVLLSNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMWOCLLSDSGVLLSNIKVLPTWSTPVHADPKLC 401

RESULT 8
US-09-243-008-4
Sequence 4, Application US/09243008
Publication No. US2004000534A1
GENERAL INFORMATION:
APPLICANT: Seed, Brian et al.
TITLE OF INVENTION: Redirection of Cellular Immunity by
Receptor Chimeras
NUMBER OF SEQUENCES: 40
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 MB
COMPUTER: IBM PS/2 Model 502 or 555X
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: Wordperfect (Version 5.0)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/243,008
FILING DATE: 02-Feb-1999
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/394,176
FILING DATE: SEPTEMBER 11, 1995
APPLICATION NUMBER: 08/203,866
FILING DATE: February 28, 1994
APPLICATION NUMBER: 07/847,566
FILING DATE: March 6, 1992
APPLICATION NUMBER: 07/665,961

FILING DATE: March 7, 1991
ATTORNEY/AGENT INFORMATION:
NAME: Karen F. Leach, Ph.D
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/270001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 575 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-243-008-4

Query Match 59.7%; Score 2039; DB 11; Length 575;
Best Local Similarity 99.0%; Pred. No. 5.5e-135;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;
OY 1 MNRGVPRHLLVQLALLPAATQGNKVLGKGDVTELTCTASQKSIQFHMKNNOIK 60
DB 1 MNRGVPRHLLVQLALLPAATQGNKVLGKGDVTELTCTASQKSIQFHMKNNOIK 60
OY 61 ILNGSGFLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILNGSGFLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120
OY 121 LVFGLTANSDTHLLOQGSLLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLLOQGSLLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
OY 181 TWCTVQLONQKKEFKIDIVLAFOKASSIYKKEGEVFSPLAFTVEKLTSGGELMW 240
DB 181 TWCTVQLONQKKEFKIDIVLAFOKASSIYKKEGEVFSPLAFTVEKLTSGGELMW 240
OY 241 QAERASSKSWITPDLKNKEVSVKRVTDPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
DB 241 QAERASSKSWITPDLKNKEVSVKRVTDPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
OY 301 LEAKTGKLEHENVLVNVRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKYSKKEKPYW 360
DB 301 LEAKTGKLEHENVLVNVRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKYSKKEKPYW 360
OY 361 LNPEAGMWOCLLSDSGVLLSNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMWOCLLSDSGVLLSNIKVLPTWSTPVHADPKLC 401

RESULT 9
US-09-939-537-5
Sequence 5, Application US/09939537
Publication No. US20030138410A1
GENERAL INFORMATION:
APPLICANT: Seed, Brian
Banapur, Babak
Romeo, Charles
Kolanus, Waldemar
TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
CELLS BY CHIMERIC CD4 RECEPTOR-BEARING CELLS
NUMBER OF SEQUENCES: 53
CORRESPONDENCE ADDRESS:
ADDRESSEE: Clark & Elbing LLP
STREET: 176 Federal Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible


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/ OPERATING SYSTEM: DOS
/ SOFTWARE: FastSeq for Windows Version 2.0
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/939,537
/ FILING DATE: 24-Aug-2001
/ CLASSIFICATION: <Unknown>
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 06/284,391
/ FILING DATE: 02-AUG-1994
/ APPLICATION NUMBER: 08/195,395
/ FILING DATE: 14-FEB-1994
/ APPLICATION NUMBER: 07/847,566
/ FILING DATE: 06-MAR-1992
/ APPLICATION NUMBER: 07/665,961
/ FILING DATE: 07-MAR-1991
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Elding, Karen L.
/ REGISTRATION NUMBER: 35,238
/ REFERENCE/DOCKET NUMBER: 00786/247001
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 617-428-0200
/ TELEFAX: 617-428-7045
/ TELEX: <Unknown>
/ INFORMATION FOR SEQ ID NO: 5:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 462 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ SEQUENCE DESCRIPTION: SEQ ID NO: 5:
US-09-939-537-5

Query Match      59.6%; Score 2035; DB 10; Length 462;
Best Local Similarity 98.8%; Pred. No. 7.9e-135;
Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;

1  MKRGVPRHLLVLVQLALLPAATQGNKVVLAGKGDVVELTCTASQKSIQPHMKNSNOIK 60
Db 1  MKRGVPRHLLVLVQLALLPAATQGNKVVLAGKGDVVELTCTASQKSIQPHMKNSNOIK 60
QY 61  ILGNQSFLLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVOL 120
Db 61  ILGNQSFLLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVOL 120
QY 121  LVFGLTANSDTHLQOGSLTTLTSPSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Db 121  LVFGLTANSDTHLQOGSLTTLTSPSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181  TWTCTVLONOKKVEPKIDIVILAFOKASSIVYKKEGEQVEFSPLAFTVEKLTSGGELMW 240
Db 181  TWTCTVLONOKKVEPKIDIVILAFOKASSIVYKKEGEQVEFSPLAFTVEKLTSGGELMW 240
QY 241  QAEARSSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTIA 300
Db 241  QAEARSSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTIA 300
QY 301  LEAKTGKLEHVEVNLVVMRAATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVWV 360
Db 301  LEAKTGKLEHVEVNLVVMRAATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVWV 360
QY 361  LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPOLC 401
Db 361  LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPOLC 401

RESULT 10
US-09-243-008-5
/ Sequence 5; Application US/99243008
/ Publication No. US20040005334A1
/ GENERAL INFORMATION:
/ APPLICANT: Seed, Brian et al.
/ TITLE OF INVENTION: Redirection of Cellular Immunity by
```

```
/ Receptor Chimeras
/ NUMBER OF SEQUENCES: 40
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Fish & Richardson P.C.
/ STREET: 225 Franklin Street
/ CITY: Boston
/ STATE: MA
/ COUNTRY: USA
/ ZIP: 02110-2804
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
/ COMPUTER: IBM PS/2 Model 502 or 55SX
/ OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
/ SOFTWARE: Wordperfect (Version 5.0)
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/243,008
/ FILING DATE: 02-Feb-1999
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US/08/394,176
/ FILING DATE: SEPTEMBER 11, 1995
/ APPLICATION NUMBER: 08/203,866
/ FILING DATE: February 28, 1994
/ APPLICATION NUMBER: 07/847,566
/ FILING DATE: March 6, 1992
/ APPLICATION NUMBER: 07/665,961
/ FILING DATE: March 7, 1991
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Karen F. Lech, Ph.D
/ REGISTRATION NUMBER: 35,238
/ REFERENCE/DOCKET NUMBER: 00786/270001
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (617) 542-5070
/ TELEFAX: (617) 542-8906
/ TELEX: 200154
/ INFORMATION FOR SEQ ID NO: 5:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 462 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ SEQUENCE DESCRIPTION: SEQ ID NO: 5:
US-09-243-008-5

Query Match      59.6%; Score 2035; DB 11; Length 462;
Best Local Similarity 98.8%; Pred. No. 7.9e-135;
Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;

1  MKRGVPRHLLVLVQLALLPAATQGNKVVLAGKGDVVELTCTASQKSIQPHMKNSNOIK 60
Db 1  MKRGVPRHLLVLVQLALLPAATQGNKVVLAGKGDVVELTCTASQKSIQPHMKNSNOIK 60
QY 61  ILGNQSFLLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVOL 120
Db 61  ILGNQSFLLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVOL 120
QY 121  LVFGLTANSDTHLQOGSLTTLTSPSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Db 121  LVFGLTANSDTHLQOGSLTTLTSPSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181  TWTCTVLONOKKVEPKIDIVILAFOKASSIVYKKEGEQVEFSPLAFTVEKLTSGGELMW 240
Db 181  TWTCTVLONOKKVEPKIDIVILAFOKASSIVYKKEGEQVEFSPLAFTVEKLTSGGELMW 240
QY 241  QAEARSSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTIA 300
Db 241  QAEARSSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTIA 300
QY 301  LEAKTGKLEHVEVNLVVMRAATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVWV 360
Db 301  LEAKTGKLEHVEVNLVVMRAATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVWV 360
QY 361  LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
Db 361  LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
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Db 361 LNPEAGMWQCLLSDSGVLLSESNIKVLPWTWSTPVHADPOLC 401

RESULT 11

US-09-891-119A-9

Sequence 9, Application US/09891119A

Publication No. US20040013683A1

GENERAL INFORMATION:

APPLICANT: Maddon, Paul J.

TITLE OF INVENTION: DERIVATIVES OF SOLUBLE T-4

FILE REFERENCE: 24577-CY-8

CURRENT APPLICATION NUMBER: US/09/891,119A

CURRENT FILING DATE: 2001-06-25

NUMBER OF SEQ ID NOS: 22

SOFTWARE: PatentIn version 3.1

SEQ ID NO 9

LENGTH: 457

TYPE: PRT

ORGANISM: human

US-09-891-119A-9

Query Match 59.5%; Score 2030; DB 11; Length 457;

Best Local Similarity 99.5%; Pred. No. 1.7e-134;

Matches 394; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 MNRGVPRHLLVQLALLPAATQGNKVLGKGDVETLCTASQKKSIOFHMKNSNQIK 60

Db 1 MNRGVPRHLLVQLALLPAATQGNKVLGKGDVETLCTASQKKSIOFHMKNSNQIK 60

QY 61 ILNGQSFLLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEVQL 120

Db 61 ILNGQSFLLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEVQL 120

QY 121 LVFGLTANSDTHLLQGGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180

Db 121 LVFGLTANSDTHLLQGGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180

QY 181 TWCTVLOKQKVEFKIDIVLAFQKASSIVYKKEGQVEFSFPLATVEKLTSGGELMW 240

Db 181 TWCTVLOKQKVEFKIDIVLAFQKASSIVYKKEGQVEFSFPLATVEKLTSGGELMW 240

QY 241 QAEKSSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPQALPOYAGSGNLTIA 300

Db 241 QAEKSSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPQALPOYAGSGNLTIA 300

QY 301 LEAKTGKHOEVLVVMRATOLQKVLTCBVWGPTSPKMLSLKLENKEAKVSKKEKPVW 360

Db 301 LEAKTGKHOEVLVVMRATOLQKVLTCBVWGPTSPKMLSLKLENKEAKVSKKEKPVW 360

QY 361 LNPEAGMWQCLLSDSGVLLSESNIKVLPWTWSTPV 396

Db 361 LNPEAGMWQCLLSDSGVLLSESNIKVLPWTWSTPV 396

RESULT 12

US-09-939-537-29

Sequence 29, Application US/09939537

Publication No. US20030138410A1

GENERAL INFORMATION:

APPLICANT: Seed, Brian

Banapur, Babak

Romeo, Charles

Kolanus, Waldemar

TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED

CELLS BY CHIMERIC CD4 RECEPTOR- BEARING CELLS

NUMBER OF SEQUENCES: 53

CORRESPONDENCE ADDRESS:

ADDRESSEE: Clark & Elbing LLP

STREET: 176 Federal Street

CITY: Boston

STATE: MA

COUNTRY: USA

ZIP: 02110

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: DOS

SOFTWARE: PatSeq for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/939,537

FILING DATE: 24-Aug-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/284,391

FILING DATE: 02-AUG-1994

APPLICATION NUMBER: 08/195,395

FILING DATE: 14-FEB-1994

APPLICATION NUMBER: 07/847,566

FILING DATE: 06-MAR-1992

APPLICATION NUMBER: 07/665,961

FILING DATE: 07-MAR-1991

ATTORNEY/AGENT INFORMATION:

NAME: Elbing, Karen L

REGISTRATION NUMBER: 35,238

REFERENCE/DOCKET NUMBER: 00786/247001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 617-428-0200

TELEFAX: 617-428-7045

TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 29:

SEQUENCE CHARACTERISTICS:

LENGTH: 398 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 29:

US-09-939-537-29

Query Match 59.4%; Score 2029; DB 10; Length 398;

Best Local Similarity 100.0%; Pred. No. 1.7e-134;

Matches 394; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MNRGVPRHLLVQLALLPAATQGNKVLGKGDVETLCTASQKKSIOFHMKNSNQIK 60

Db 1 MNRGVPRHLLVQLALLPAATQGNKVLGKGDVETLCTASQKKSIOFHMKNSNQIK 60

QY 61 ILNGQSFLLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEVQL 120

Db 61 ILNGQSFLLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEVQL 120

QY 121 LVFGLTANSDTHLLQGGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180

Db 121 LVFGLTANSDTHLLQGGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180

QY 181 TWCTVLOKQKVEFKIDIVLAFQKASSIVYKKEGQVEFSFPLATVEKLTSGGELMW 240

Db 181 TWCTVLOKQKVEFKIDIVLAFQKASSIVYKKEGQVEFSFPLATVEKLTSGGELMW 240

QY 241 QAEKSSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPQALPOYAGSGNLTIA 300

Db 241 QAEKSSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPQALPOYAGSGNLTIA 300

QY 301 LEAKTGKHOEVLVVMRATOLQKVLTCBVWGPTSPKMLSLKLENKEAKVSKKEKPVW 360

Db 301 LEAKTGKHOEVLVVMRATOLQKVLTCBVWGPTSPKMLSLKLENKEAKVSKKEKPVW 360

QY 361 LNPEAGMWQCLLSDSGVLLSESNIKVLPWTWSTPV 394

Db 361 LNPEAGMWQCLLSDSGVLLSESNIKVLPWTWSTPV 394

RESULT 13

US-10-103-597A-39

Sequence 39, Application US/10103597A

Publication No. US20030096432A1

```
/ GENERAL INFORMATION:
/ APPLICANT: Jakobsen, Bent Karsten
/ TITLE OF INVENTION: Screening Methods
/ FILE REFERENCE: 102286.142
/ CURRENT APPLICATION NUMBER: US/10/103,597A
/ CURRENT FILING DATE: 2002-10-17
/ PRIOR APPLICATION NUMBER: PCT/GB00/03579
/ PRIOR FILING DATE: 2000-09-18
/ PRIOR APPLICATION NUMBER: GB 9922352.1
/ PRIOR FILING DATE: 1999-09-21
/ NUMBER OF SEQ ID NOS: 39
/ SOFTWARE: FaestSeq for Windows Version 4.0
/ SEQ ID NO 39
/ LENGTH: 458
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-10-103-597A-39

Query Match          59.3%; Score 2024; DB 14; Length 458;
Best Local Similarity 99.2%; Pred. No. 4.6e-134;
Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 NMRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHWKNSNOIK 60
DB 1 NMRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHWKNSNOIK 60
QY 61 ILGNQGSFLTGGPSKLNDRADSRSLMDQGNPPLIIKULKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILGNQGSFLTGGPSKLNDRADSRSLMDQGNPPLIIKULKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDBTHLLOGOSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDBTHLLOGOSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 122 LVFGLTANSDBTHLLOGOSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 122 LVFGLTANSDBTHLLOGOSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFTVEKLTGSGELMW 240
QY 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAEKASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QAEKASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
QY 241 QAEKASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QAEKASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKLEHVEVNLVVMRATQLOKNTLCEVWGPTSPKMLSLKLENKAKVSKREKPYVW 360
DB 301 LEAKTGKLEHVEVNLVVMRATQLOKNTLCEVWGPTSPKMLSLKLENKAKVSKREKPYVW 360
QY 301 LEAKTGKLEHVEVNLVVMRATQLOKNTLCEVWGPTSPKMLSLKLENKAKVSKREKPYVW 360
DB 301 LEAKTGKLEHVEVNLVVMRATQLOKNTLCEVWGPTSPKMLSLKLENKAKVSKREKPYVW 360
QY 361 LNPEAGMOCCLSDSGQVLLSNIKYLPTWSTPVEP 396
DB 361 LNPEAGMOCCLSDSGQVLLSNIKYLPTWSTPVEP 396

RESULT 14
US-10-188-444-39
/ Sequence 39, Application US/10188444
/ Publication No. US20030104635A1
/ GENERAL INFORMATION:
/ APPLICANT: Jakobsen, Bent Karsten
/ TITLE OF INVENTION: Screening Methods
/ FILE REFERENCE: 102286.142 (CIP)
/ CURRENT APPLICATION NUMBER: US/10/188,444
/ CURRENT FILING DATE: 2002-07-02
/ PRIOR APPLICATION NUMBER: PCT/GB00/03579
/ PRIOR FILING DATE: 2000-09-18
/ PRIOR APPLICATION NUMBER: GB 9922352.1
/ PRIOR FILING DATE: 1999-09-21
/ NUMBER OF SEQ ID NOS: 39
/ SOFTWARE: FaestSeq for Windows Version 4.0
/ SEQ ID NO 39
/ LENGTH: 458
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-10-188-444-39
```

```
Query Match          59.3%; Score 2024; DB 14; Length 458;
Best Local Similarity 99.2%; Pred. No. 4.6e-134;
Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 NMRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHWKNSNOIK 60
DB 1 NMRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHWKNSNOIK 60
QY 61 ILGNQGSFLTGGPSKLNDRADSRSLMDQGNPPLIIKULKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILGNQGSFLTGGPSKLNDRADSRSLMDQGNPPLIIKULKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDBTHLLOGOSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDBTHLLOGOSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 121 LVFGLTANSDBTHLLOGOSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDBTHLLOGOSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFTVEKLTGSGELMW 240
QY 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAEKASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QAEKASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
QY 241 QAEKASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QAEKASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKLEHVEVNLVVMRATQLOKNTLCEVWGPTSPKMLSLKLENKAKVSKREKPYVW 360
DB 301 LEAKTGKLEHVEVNLVVMRATQLOKNTLCEVWGPTSPKMLSLKLENKAKVSKREKPYVW 360
QY 301 LEAKTGKLEHVEVNLVVMRATQLOKNTLCEVWGPTSPKMLSLKLENKAKVSKREKPYVW 360
DB 301 LEAKTGKLEHVEVNLVVMRATQLOKNTLCEVWGPTSPKMLSLKLENKAKVSKREKPYVW 360
QY 361 LNPEAGMOCCLSDSGQVLLSNIKYLPTWSTPVEP 396
DB 361 LNPEAGMOCCLSDSGQVLLSNIKYLPTWSTPVEP 396

RESULT 15
US-10-207-655-170
/ Sequence 170, Application US/10207655
/ Publication No. US20030118592A1
/ GENERAL INFORMATION:
/ APPLICANT: Ledbetter, Jeffrey A.
/ TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
/ FILE REFERENCE: 390069.401C1
/ CURRENT APPLICATION NUMBER: US/10/207,655
/ CURRENT FILING DATE: 2002-07-25
/ NUMBER OF SEQ ID NOS: 426
/ SOFTWARE: Patentin version 3.0
/ SEQ ID NO 170
/ LENGTH: 458
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-10-207-655-170

Query Match          59.3%; Score 2024; DB 14; Length 458;
Best Local Similarity 99.2%; Pred. No. 4.6e-134;
Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 NMRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHWKNSNOIK 60
DB 1 NMRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHWKNSNOIK 60
QY 61 ILGNQGSFLTGGPSKLNDRADSRSLMDQGNPPLIIKULKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILGNQGSFLTGGPSKLNDRADSRSLMDQGNPPLIIKULKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDBTHLLOGOSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDBTHLLOGOSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 121 LVFGLTANSDBTHLLOGOSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDBTHLLOGOSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFTVEKLTGSGELMW 240
QY 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAEKASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QAEKASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
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|||||
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTDPRKQMGKPLHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKHOEVNLVVMRATOLQKULTCCEWGPSPKMLSLKLENKAKVSKREKPYW 360
DB 301 LEAKTGKHOEVNLVVMRATOLQKULTCCEWGPSPKMLSLKLENKAKVSKREKAVW 360
QY 361 LNPEAGMWOCCLSDSGOVLLESNIKVLPTWSTPVP 396
DB 361 LNPEAGMWOCCLSDSGOVLLESNIKVLPTWSTPVP 396
RESULT 16
US-10-097-044A-1
; Sequence 1, Application US/10097044A
; Publication No. US20030143220A1
; GENERAL INFORMATION:
; APPLICANT: Capon, Daniel J.
; Gregory, Timothy J.
; TITLE OF INVENTION: Adhesion Variants
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Genentech, Inc.
; STREET: 460 Point San Bruno Blvd
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: pacin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/097,044A
; FILING DATE: 28-May-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/457,918
; FILING DATE: 1-JUN-1995
; APPLICATION NUMBER: 08/236311
; FILING DATE: 02-MAY-1994
; APPLICATION NUMBER: 07/936190
; FILING DATE: 26-AUG-1992
; APPLICATION NUMBER: 07/842777
; FILING DATE: 18-FEB-1992
; APPLICATION NUMBER: 07/250785
; FILING DATE: 28-SEP-1988
; APPLICATION NUMBER: 07/104329
; FILING DATE: 02-OCT-1987
; ATTORNEY/AGENT INFORMATION:
; NAME: Kubinec, Jeffrey S.
; REGISTRATION NUMBER: 36,575
; REFERENCE/DOCKET NUMBER: P0444PLC3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415/225-8228
; TELEFAX: 415/952-9881
; TELEX: 910/371-7168
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 402 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-10-097-044A-1
Query Match 59.1%; Score 2017; DB 14; Length 402;
Best Local Similarity 99.7%; Pred. No. 1.2e-133;
Matches 392; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 MNRGVPFRHLILVQLALPPATQGNKVLGKKGTVELTCTASQKSIQFHMNSNQIK 60
DB 1 MNRGVPFRHLILVQLALPPATQGNKVLGKKGTVELTCTASQKSIQFHMNSNQIK 60

QY 61 ILGNQGSFLTKGPKLNDRADSRRLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILGNQGSFLTKGPKLNDRADSRRLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDTHLLQGSSTLTLESPPGSSPSVOCRRPRGKNIOGGKTLVSQLELDSG 180
DB 121 LVFGLTANSDTHLLQGSSTLTLESPPGSSPSVOCRRPRGKNIOGGKTLVSQLELDSG 180
QY 121 TWCTTVLQONQKVEFKIDIVLAFQKASSIYKKKEGQVERSPFLAFTVEKLTSGGELMW 240
DB 121 TWCTTVLQONQKVEFKIDIVLAFQKASSIYKKKEGQVERSPFLAFTVEKLTSGGELMW 240
QY 181 QAERASSSSKSWITFDLKNKEVSVKRVTDPRKQMGKPLHLTLPOALPOYAGSGNLTIA 300
DB 181 QAERASSSSKSWITFDLKNKEVSVKRVTDPRKQMGKPLHLTLPOALPOYAGSGNLTIA 300
QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTDPRKQMGKPLHLTLPOALPOYAGSGNLTIA 300
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTDPRKQMGKPLHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKHOEVNLVVMRATOLQKULTCCEWGPSPKMLSLKLENKAKVSKREKPYW 360
DB 301 LEAKTGKHOEVNLVVMRATOLQKULTCCEWGPSPKMLSLKLENKAKVSKREKAVW 360
QY 361 LNPEAGMWOCCLSDSGOVLLESNIKVLPTWSTP 393
DB 361 LNPEAGMWOCCLSDSGOVLLESNIKVLPTWSTP 393
RESULT 17
US-10-151-274-3
; Sequence 3, Application US/10151274
; Publication No. US20030064071A1
; GENERAL INFORMATION:
; APPLICANT: Littman, Dan R.
; APPLICANT: Kwon, Douglas S.
; APPLICANT: van Kooyk, Yvette
; APPLICANT: Geltenbeck, Theo
; TITLE OF INVENTION: METHODS OF USING A FACILITATOR OF RETROVIRAL ENTRY
; TITLE OF INVENTION: INTO
; FILE REFERENCE: 1049-1-017
; CURRENT APPLICATION NUMBER: US/10/151,274
; PRIOR FILING DATE: 2002-05-20
; PRIOR APPLICATION NUMBER: US/09/517,605
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 458
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-151-274-3
Query Match 59.1%; Score 2016; DB 12; Length 458;
Best Local Similarity 99.0%; Pred. No. 1.7e-133;
Matches 392; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
QY 1 MNRGVPFRHLILVQLALPPATQGNKVLGKKGTVELTCTASQKSIQFHMNSNQIK 60
DB 1 MNRGVPFRHLILVQLALPPATQGNKVLGKKGTVELTCTASQKSIQFHMNSNQIK 60
QY 61 ILGNQGSFLTKGPKLNDRADSRRLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILGNQGSFLTKGPKLNDRADSRRLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDTHLLQGSSTLTLESPPGSSPSVOCRRPRGKNIOGGKTLVSQLELDSG 180
DB 121 LVFGLTANSDTHLLQGSSTLTLESPPGSSPSVOCRRPRGKNIOGGKTLVSQLELDSG 180
QY 181 TWCTTVLQONQKVEFKIDIVLAFQKASSIYKKKEGQVERSPFLAFTVEKLTSGGELMW 240
DB 181 TWCTTVLQONQKVEFKIDIVLAFQKASSIYKKKEGQVERSPFLAFTVEKLTSGGELMW 240
QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTDPRKQMGKPLHLTLPOALPOYAGSGNLTIA 300
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTDPRKQMGKPLHLTLPOALPOYAGSGNLTIA 300


```

; TITLE OF INVENTION: METHOD OF PREPARING A PROTEIN ARRAY BASED ON
; FILE OF INVENTION: BIOCHEMICAL PROTEIN-PROTEIN INTERACTION
; FILE REFERENCE: 65823/JPM/PT
; CURRENT APPLICATION NUMBER: US/10/092,138
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 25
; LENGTH: 458
; TYPE: PRT
; ORGANISM: human
US-10-092-138-25

```

```

Query Match      58.8%; Score 2006; DB 14; Length 458;
Best Local Similarity 98.5%; Pred. No. 8.6e-133;
Matches 390; Conservative 2; Mismatches 4; Indels 0; Gaps 0;

```

```

QY 1 MNRGVPFPHLLVLTOLALLPATOGNKVVLGKGGDTVELTCTASQKSIQFHMKNNSNOIK 60
DB 1 MNRGVPFPHLLVLTOLALLPATOGNKVVLGKGGDTVELTCTASQKSIQFHMKNNSNOIK 60
QY 61 ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIIRNLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIIRNLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSPTHLLOGSGLTTLTLESPGSSPSVOCRSRPGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSPTHLLOGSGLTTLTLESPGSSPSVOCRSRPGKNIQGGKTLVSQLELDQSG 180
QY 121 LVFGLTANSPTHLLOGSGLTTLTLESPGSSPSVOCRSRPGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSPTHLLOGSGLTTLTLESPGSSPSVOCRSRPGKNIQGGKTLVSQLELDQSG 180
QY 181 TWCTCTVLONQKKEFKIDIVLAFQKASSIYKKKEGQVPSFPLAFTVEKLTGSGELMW 240
DB 181 TWCTCTVLONQKKEFKIDIVLAFQKASSIYKKKEGQVPSFPLAFTVEKLTGSGELMW 240
QY 181 TWCTCTVLONQKKEFKIDIVLAFQKASSIYKKKEGQVPSFPLAFTVEKLTGSGELMW 240
DB 181 TWCTCTVLONQKKEFKIDIVLAFQKASSIYKKKEGQVPSFPLAFTVEKLTGSGELMW 240
QY 241 QAEKSSSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPHLTLPQALPOYAGSGNLTLA 300
DB 241 QAEKSSSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPHLTLPQALPOYAGSGNLTLA 300
QY 301 LEAKTGKLEHENVLVVNRATOLQKNLTCEVWGPTSPKLMSTLKENKAKYSKREKPYWV 360
DB 301 LEAKTGKLEHENVLVVNRATOLQKNLTCEVWGPTSPKLMSTLKENKAKYSKREKPYWV 360
QY 361 LNPEAGMWQCLISDSGQVLLSNNIKVLPWTSTPV 396
DB 361 LNPEAGMWQCLISDSGQVLLSNNIKVLPWTSTPV 396

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RESULT 21
US-09-891-119A-2
; Sequence 2, Application US/09891119A
; Publication No. US20040013683A1
; GENERAL INFORMATION:
; APPLICANT: Maddon, Paul J.
; TITLE OF INVENTION: DERIVATIVES OF SOLUBLE T-4
; FILE REFERENCE: 24577-CY-B
; CURRENT APPLICATION NUMBER: US/09/891,119A
; CURRENT FILING DATE: 2001-06-25
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: Patent In version 3.1
; SEQ ID NO 2
; LENGTH: 397
; TYPE: PRT
; ORGANISM: Human
US-09-891-119A-2

```

```

Query Match      58.6%; Score 2001; DB 11; Length 397;
Best Local Similarity 98.7%; Pred. No. 1.6e-132;
Matches 389; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

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```

QY 1 MNRGVPFPHLLVLTOLALLPATOGNKVVLGKGGDTVELTCTASQKSIQFHMKNNSNOIK 60
DB 1 MNRGVPFPHLLVLTOLALLPATOGNKVVLGKGGDTVELTCTASQKSIQFHMKNNSNOIK 60
QY 61 ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIIRNLKIEDSDTYICEVEDQKEEVOL 120

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DB 61 ILNGSGSLTKGSPSKLNDRADSRSLMDQGNFPLIIRNLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSPTHLLOGSGLTTLTLESPGSSPSVOCRSRPGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSPTHLLOGSGLTTLTLESPGSSPSVOCRSRPGKNIQGGKTLVSQLELDQSG 180
QY 181 TWCTCTVLONQKKEFKIDIVLAFQKASSIYKKKEGQVPSFPLAFTVEKLTGSGELMW 240
DB 181 TWCTCTVLONQKKEFKIDIVLAFQKASSIYKKKEGQVPSFPLAFTVEKLTGSGELMW 240
QY 241 QAEKSSSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPHLTLPQALPOYAGSGNLTLA 300
DB 241 QAEKSSSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPHLTLPQALPOYAGSGNLTLA 300
QY 301 LEAKTGKLEHENVLVVNRATOLQKNLTCEVWGPTSPKLMSTLKENKAKYSKREKPYWV 360
DB 301 LEAKTGKLEHENVLVVNRATOLQKNLTCEVWGPTSPKLMSTLKENKAKYSKREKPYWV 360
QY 361 LNPEAGMWQCLISDSGQVLLSNNIKVLPWTSTPV 394
DB 361 LNPEAGMWQCLISDSGQVLLSNNIKVLPWTSTPV 394

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RESULT 22
US-10-097-044A-4
; Sequence 4, Application US/10097044A
; Publication No. US20030143220A1
; GENERAL INFORMATION:
; APPLICANT: Capon, Daniel J.
; TITLE OF INVENTION: Adhesion Variants
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 460 Point San Bruno Blvd
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: patin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/097,044A
; FILING DATE: 28-May-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/457,918
; FILING DATE: 1-JUN-1995
; APPLICATION NUMBER: 08/236311
; FILING DATE: 02-MAY-1994
; APPLICATION NUMBER: 07/936190
; FILING DATE: 26-AUG-1992
; APPLICATION NUMBER: 07/842777
; FILING DATE: 18-FEB-1992
; APPLICATION NUMBER: 07/250785
; FILING DATE: 28-SEP-1988
; APPLICATION NUMBER: 07/104329
; FILING DATE: 02-OCT-1987
; ATTORNEY/AGENT INFORMATION:
; NAME: Kubinec, Jeffrey S.
; REGISTRATION NUMBER: 36,575
; REFERENCE/DOCKET NUMBER: P0444P1C3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415/225-8228
; TELEFAX: 415/952-9881
; TELEEX: 910/371-7168
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 434 amino acids

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TYPE: amino acid
TOPOLOGY: linear
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-10-097-044A-4

Query Match 55.8%; Score 1904; DB 14; Length 434;
Best Local Similarity 99.7%; Pred. No. 1.2e-125;
Matches 369; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 24 OGNKVLGKKGDVETLTCTASOKSIOFHWNKSNQIKILGNOSFLTKGPKSLNDRADSR 83
DB 56 OGNKVLGKKGDVETLTCTASOKSIOFHWNKSNQIKILGNOSFLTKGPKSLNDRADSR 115
QY 84 RSLMDGNFPLIILKLIKIEDSDTYICEVEDQKEVOLVFGLTANSDFHLLQGOSLTTLT 143
DB 116 RSLMDGNFPLIILKLIKIEDSDTYICEVEDQKEVOLVFGLTANSDFHLLQGOSLTTLT 175
QY 144 ESPGSSPSVQCSPPGKNIOGKTLVSQLELDGSGTWTCTVLQNKVYEFKIDIVLA 203
DB 176 ESPGSSPSVQCSPPGKNIOGKTLVSQLELDGSGTWTCTVLQNKVYEFKIDIVLA 235
QY 204 FOKASSIYKKEGEVFSFPLAFTVEKLTSGGELMWOAERASSSKSWITFDLKNKEVS 263
DB 236 FOKASSIYKKEGEVFSFPLAFTVEKLTSGGELMWOAERASSSKSWITFDLKNKEVS 295
QY 264 KRVTDPKLQMGKPLHLTLPLQALPOYAGSGNLTALBAKTKLHQEVNLVWMATQ 323
DB 296 KRVTDPKLQMGKPLHLTLPLQALPOYAGSGNLTALBAKTKLHQEVNLVWMATQ 355
QY 324 KULTCVMGPTSPKMLSLKENKAIVSRKRPVWLNPEAGMOCCLSDSGVLLSESN 383
DB 356 KULTCVMGPTSPKMLSLKENKAIVSRKRPVWLNPEAGMOCCLSDSGVLLSESN 415
QY 384 IKVLPWSTP 393
DB 416 IKVLPWSTP 425

RESULT 23

US-09-759-841-6
Sequence 6, Application US/09759841
Patent No. US20010039026X1

GENERAL INFORMATION:
APPLICANT: Rickett, Graham A
APPLICANT: Dobbs, Susan
TITLE OF INVENTION: Assay Method
FILE REFERENCE: PCI0348APME
CURRENT APPLICATION NUMBER: US/09/759,841
PRIOR FILING DATE: 2001-01-12
PRIOR APPLICATION NUMBER: GB 0000661.9
PRIOR FILING DATE: 2000-01-12
PRIOR APPLICATION NUMBER: GB 0000663.5
PRIOR FILING DATE: 2000-01-12
PRIOR APPLICATION NUMBER: GB 0000659.3
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 6
LENGTH: 370
TYPE: PRT
ORGANISM: Homo sapiens
US-09-759-841-6

Query Match 55.4%; Score 1891; DB 9; Length 370;
Best Local Similarity 99.7%; Pred. No. 8.1e-125;
Matches 367; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 27 KVLGKKGDVETLTCTASOKSIOFHWNKSNQIKILGNOSFLTKGPKSLNDRADSR 86
DB 2 KVLGKKGDVETLTCTASOKSIOFHWNKSNQIKILGNOSFLTKGPKSLNDRADSR 61
QY 87 WDNQNFPLIILKLIKIEDSDTYICEVEDQKEVOLVFGLTANSDFHLLQGOSLTTLLESP 146

DB 62 WDNQNFPLIILKLIKIEDSDTYICEVEDQKEVOLVFGLTANSDFHLLQGOSLTTLLESP 121

QY 147 PGSSPSVQCSPPGKNIOGKTLVSQLELDGSGTWTCTVLQNKVYEFKIDIVLAPOK 206

DB 122 PGSSPSVQCSPPGKNIOGKTLVSQLELDGSGTWTCTVLQNKVYEFKIDIVLAPOK 181

QY 207 ASSIYKKEGEVFSFPLAFTVEKLTSGGELMWOAERASSSKSWITFDLKNKEVS 266

DB 182 ASSIYKKEGEVFSFPLAFTVEKLTSGGELMWOAERASSSKSWITFDLKNKEVS 241

QY 267 TDDPKLQMGKPLHLTLPLQALPOYAGSGNLTALBAKTKLHQEVNLVWMATQ 326

DB 242 TDDPKLQMGKPLHLTLPLQALPOYAGSGNLTALBAKTKLHQEVNLVWMATQ 301

QY 327 TCEVWGPTSPKMLSLKENKAIVSRKRPVWLNPEAGMOCCLSDSGVLLSESN 386

DB 302 TCEVWGPTSPKMLSLKENKAIVSRKRPVWLNPEAGMOCCLSDSGVLLSESN 361

QY 387 LPTWSTPV 394

DB 362 LPTWSTPV 369

RESULT 24

US-10-024-329-32
Sequence 32, Application US/10024329
Publication No. US20030157063A1

GENERAL INFORMATION:
APPLICANT: SANHADJI, Kamel
APPLICANT: TOURAINE, Jean-Louis
APPLICANT: LEROY, Pierre
APPLICANT: MEHRAJI, Majid
TITLE OF INVENTION: Gene therapy using anti-gp41 antibody and cd4 immunoadhesin
FILE REFERENCE: 109993
CURRENT APPLICATION NUMBER: US/10/024,329
PRIOR FILING DATE: 2001-12-21
NUMBER OF SEQ ID NOS: 33
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 32
LENGTH: 448
TYPE: PRT
ORGANISM: human scd4
US-10-024-329-32

Query Match 55.3%; Score 1886.5; DB 14; Length 448;
Best Local Similarity 96.7%; Pred. No. 2.2e-124;
Matches 383; Conservative 1; Mismatches 3; Indels 9; Gaps 8;

QY 1 MNRGVPFPHLLVQLALPAAQGNKVLGKKGDVETLTCTASOKSIOFHWNKSNQIK 60

DB 1 MNRGVPF-HLLVQLALPAAQGNKVLGKKGDVETLTCTASOKSIOFHWNKSNQIK 59

QY 61 ILGNOSFLTKGPKSLNDRADSRSLMDGNFPLIILKLIKIEDSDTYICEVEDQKEVOL 120

DB 60 ILGNOSFLTKGPKSLNDRADSRSLMDGNFPLIILKLIKIEDSDTYICEVEDQKEVOL 117

QY 121 LVFGLTANSDFHLLQGOSLTTLLESPGSSPSVQCSPPGKNIOGKTLVSQLELDGSG 180

DB 118 LVFGLTANSDFHLLQGOSLTTLLESPGSSPSVQCSPPGKNIOGKTLVSQLELDGSG 174

QY 181 TWCTCVLQNKVYEFKIDIVLAPOKASSIYKKEGEVFSFPLAFTVEKLTSGGELMWO 240

DB 175 TWCTCVLQNKVYEFKIDIVLAPOKASSIYKKEGEVFSFPLAFTVEKLTSGGELMWO 231

QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKPLHLTLPLQALPOYAGSGNLT 300

DB 232 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKPLHLTLPLQALPOYAGSGNLT 291

QY 301 LEAKTGKLGKHOEVNLVWMATQ 360

DB 292 LEAKTGKLGKHOEVNLVWMATQ 351


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Db 455 HNAKTPREEOYNSTRVVSVLTVCHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR 514
QY 524 EPQVYTLPPSDELTKNOVSLTCLVKGFPSPDIAVWESNQPENNYKTTTPVLVDSGSF 583
Db 515 EPQVYTLPPSRELTKNOVSLTCLVKGFPSPDIAVWESNQPENNYKTTTPVLVDSGSF 574
QY 584 FLYSKLTVDKSRMOQGNVFSQSVMEALHNHYTQKSLSLSPG 625
Db 575 FLYSKLTVDKSRMOQGNVFSQSVMEALHNHYTQKSLSLSPG 616

RESULT 27
US-10-363-427-22
; Sequence 22, Application US/10363427
; Publication No. US20030195338A1
; GENERAL INFORMATION:
; APPLICANT: Medexgen Inc.
; APPLICANT: CHUNG, Yong Hoon
; APPLICANT: HAN, Ji Moong
; APPLICANT: LEE, Hye Ja
; APPLICANT: CHOI, Eun Yong
; APPLICANT: KIM, Jin Wi
; APPLICANT: YIM, Soo Bin
; TITLE OF INVENTION: Concatametric Immunoadhesion
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/363,427
; CURRENT FILING DATE: 2003-02-28
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Kopatentin 1.71
; SEQ ID NO 22
; LENGTH: 617
; TYPE: PR1
; ORGANISM: Homo sapiens
US-10-363-427-22

Query Match 39.6%; Score 1351.5; DB 14; Length 617;
Best Local Similarity 49.7%; Pred. No. 1.5e-86;
Matches 319; Conservative 52; Mismatches 140; Indels 131; Gaps 22;

QY 35 DTVELTCTASQKKSIFQHWKNSNQIKILNQSGFLTKGPKLNDRAHSRSLMDQNFPL 94
Db 55 DDIKWEKTSDDKIIAQFRKEKE-----TFKEKDTYKLFK-----NGTL 92
QY 95 IIKNLKIESDITYICEVEQK-EEVQLLVFGLTANSDTNLLQO-----SLTIT 142
Db 93 KIKHLTDDODIYKVSIVDTGKGVLEKIFDLK-----IOERVSFKPISWTCINTTTL 145
QY 143 LSSPPSSPVQCRSPRGKNIQGGKTLVSQLELQDSGTMTCTVLQNKVFEKIDIVL 202
Db 146 CEVWNGTDELNL-----YDGRKHLKLSQRYI--THKWTISL-----SAKFK---CT 187
QY 203 AFQKASSIYVKKGEQVEFSFPLAFTVEKLTGSGELM----- 239
Db 188 AGNKVS-----KSSVENVSCF-----KNITNALFTWGLAGDINDIPFSQMSDDIDI 237
QY 240 -WOAERASSKSKWITD-----LKNKEVSVKRVTPDRKLOMGKCLRHLTL 284
Db 238 KW--EKTSDDPKKIAQFRKEKETFEKDTYKLFNGTGLKIKHLKTTD--ODIYVVSIVDT- 292
QY 285 PQALPYAGSGNLTLLBAKTKGLHQEVNLVWIRATQLOKNTLCEVWGTSPKLMLSLK 344
Db 293 -----KGNVLEKIFDL-----KIQSRVSKPKISWTCINTTTLCEVWNGTDEP--LNLVQ 340
QY 345 ENKEATVSKRE--KPVVNLNPEAGMOCLLSDSGVLLLESNIKVLPTWSTPVEPKSCDKTH 403
Db 341 DSGHLTSGRVITHKMTTISLA-KFKC--TAGNKVSKSSVEPV---SCPAEKSCDKTH 394
QY 404 TCRPCAPPELLGGRSVFLPRPKKDTLMSITREVTCCVVVDVSHEDPEVKFNMYVDGEV 463
Db 395 TCRPCAPPELLGGRSVFLPRPKKDTLMSITREVTCCVVVDVSHEDPEVKFNMYVDGEV 454
QY 464 HNAKTPREEOYNSTRVVSVLTVLHODMLNGKEYKCKVSNKALPAPIEKTISKAKGQPR 523
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Db 455 HNAKTPREEOYNSTRVVSVLTVCHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR 514
QY 524 EPQVYTLPPSDELTKNOVSLTCLVKGFPSPDIAVWESNQPENNYKTTTPVLVDSGSF 583
Db 515 EPQVYTLPPSRELTKNOVSLTCLVKGFPSPDIAVWESNQPENNYKTTTPVLVDSGSF 574
QY 584 FLYSKLTVDKSRMOQGNVFSQSVMEALHNHYTQKSLSLSPG 625
Db 575 FLYSKLTVDKSRMOQGNVFSQSVMEALHNHYTQKSLSLSPG 616

RESULT 28
US-09-935-868-8
; Sequence 8, Application US/09935868
; Patent No. US20020164630A1
; GENERAL INFORMATION:
; APPLICANT: Regeneron Pharmaceuticals, Inc
; TITLE OF INVENTION: Receptor Based Antagonists, and Methods of Making and Using
; FILE REFERENCE: REG 203D
; CURRENT APPLICATION NUMBER: US/09/935,868
; CURRENT FILING DATE: 2002-04-11
; PRIOR APPLICATION NUMBER: PCT/US99/22045
; PRIOR FILING DATE: 1999-09-22
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 8
; LENGTH: 592
; TYPE: PR1
; ORGANISM: Homo sapiens
US-09-935-868-8

Query Match 38.7%; Score 1320; DB 9; Length 592;
Best Local Similarity 48.3%; Pred. No. 2.4e-84;
Matches 312; Conservative 53; Mismatches 161; Indels 120; Gaps 18;

QY 20 PATQGNKVLGKCKDDTVELTCTASQ-KKSIFQHWKNSNQIKILNQSGFLTKGPKSLND 78
Db 26 PAQEVARGVLNLPDSDVTLTCRGVERPDNATVNH-----VLAKKA----- 66
QY 79 RADSRSLMDQNFPLIILNLKIESDITYICE-----VEDQKEVQLLVFGLT 126
Db 67 -AGHSRSMWAGRGRLRLRSVQLHDSGNVSCYRAGRPAQVNLVDPPEEPQSLCFRKS 125
QY 127 ANSDNHLQOGSLITLSSPPSSPVQCRSPRGKNIQGGKTLVSQLELQDSGTMTCTV 186
Db 126 PLSN-----VVCWGRSTPSLTTKA-----VLVRKQNSPAEDFOEPC 165
QY 187 LONOKVFEKIDIVLAFQKASSIYVKKGEQVEFSFPLAFTVEKLTGSGEL----- 238
Db 166 QYSQESQKFSQGLAVPEQDSFYLIVSMCVASSVGSKFSKTQTFQ--GGILQPRPRANI 222
QY 239 -----W-----WOAERASSKSKW--ITDILKNKEVSVKRVTPDRKLOMGKCLRHLTL 283
Db 223 TVTAVARNPRMLSVTWDRHNSNSFYRLRELYRVARRSKTFG---TWNVKDLQNHCV 278
QY 284 LPQALPYAGSGNLTLLBAKTKGLHQEVNLVWIRATQLOKNTLCEVWGTSPKLMLSLK 343
Db 279 IH-----DAWSGLNH-----VVOJRA---OEFGGGEWSWSPAMGTWP 315
QY 344 LENK-----EAKVSKREKRVWVLNPEAGMOCLLSDSGVLLLESNIKVLPTWSTPVEPKSC 399
Db 316 TESRRPRABNEVS---TPQALTTNKDDNLIIFRDS-----ANNTSLPVDAG--EPKSC 365
QY 400 DKHTTCRPCAPPELLGGRSVFLPRPKKDTLMSITREVTCCVVVDVSHEDPEVKFNMYVD 459
Db 366 DKHTTCRPCAPPELLGGRSVFLPRPKKDTLMSITREVTCCVVVDVSHEDPEVKFNMYVD 425
QY 460 GVEVNAKTKPREEOYNSTRVVSVLTVLHODMLNGKEYKCKVSNKALPAPIEKTISKAK 519
Db 426 GVEVNAKTKPREEOYNSTRVVSVLTVLHODMLNGKEYKCKVSNKALPAPIEKTISKAK 485
QY 520 GQPRPQVYTLPPSDELTKNOVSLTCLVKGFPSPDIAVWESNQPENNYKTTTPVLVDS 579
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Db 486 GQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTIPPVLD 545
QY 580 DGSFFLYSKLTVDKSRMWOQGVFSCSVMHREALHNYTOKSLSLSPG 625
Db 546 DGSFFLYSKLTVDKSRMWOQGVFSCSVMHREALHNYTOKSLSLSPG 591

RESULT 29
US-10-287-035-8

; Sequence 8, Application US/10287035
; Publication No. US20030104567A1
; GENERAL INFORMATION:
; APPLICANT: Neil Stahl and George D. Yancopoulos
; TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
; TITLE OF INVENTION: AND USING
; FILE REFERENCE: REG 203DA
; CURRENT APPLICATION NUMBER: US/10/287,035
; CURRENT FILING DATE: 2002-11-01
; PRIOR APPLICATION NUMBER: USSN 09/935,868
; PRIOR FILING DATE: 2001-08-23
; PRIOR APPLICATION NUMBER: USSN 09/787,835
; PRIOR FILING DATE: 2001-03-22
; PRIOR APPLICATION NUMBER: USSN 09/313,942
; PRIOR FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: 09/313,942
; PRIOR FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: 60/101,858
; PRIOR FILING DATE: 1998-09-25
; NUMBER OF SEQ ID NOS: 60
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 592
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-287-035-8

Query Match 38.7%; Score 1320; DB 14; Length 592;
Best Local Similarity 48.3%; Pred. No. 2.4e-84;
Matches 312; Conservative 53; Mismatches 161; Indels 120; Gaps 18;

QY 20 PAATQGNKVVLGKGDVVELTCTASQ-KKSTQFHWKNSNQKIANGOSFLTGPCKIND 78
Db 26 PAQEVARGVLTSLPBGDSVTLTCPEVPEPDNATVHW-----VLRKPA----- 66
QY 79 RADSRRLMDQGNFPLIKNKIEDSDTYICE-----VEDQKEVQLLVFGLT 126
Db 67 -AGSHPRMAGMGRLLRLRSVQLHDSGNYSCYRAGRPAQVYHLLVDVPEEPQLSCFRKS 125
QY 127 ANSDTHLLQGOSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWCTV 186
Db 126 PLSN-----VCEMGPRSTPSLTTKA-----VLLVRKFQNSPAEDFQPC 165
QY 187 LQNGKVEFKIDIVVLAFOKASSIYKKEGEOVESFPLAFTVEKLTGSGEL----- 238
Db 166 QYSQESQKFSQCLAVPEGDSFYIVSMCVASSVSKSKSTQTFQ---GCGILOPDPANI 222
QY 239 -----W-----MOABRASSSKSW-ITFDLKNKEVSVKRYQDPKLOMGKLLPLLT 283
Db 223 TVTVAARPRMLSTWQDPHSMNSFYRLRFLRYRABRSKFTF---TMWVKDLOHHCV 278
QY 284 LPOALPOYAGSGNLTALAEAKTGKLEOVNLVVMKATOLQKNLTCEVWGPTSPKLMSLK 343
Db 279 IH-----DAMSGLRH-----VQQLRA---QEEFGQGESEWSPEAMGTPW 315
QY 344 LENK-----EAKVSKREKRPVWVLANPEAGMOCCLSDSGOVLLESNIKVLPTMSTVEPESC 399
Db 316 TESRSPPAENEVS---TPMQALTTNKDDNLTFRDS-----ANATSLPVODAG-EPKSC 365
QY 400 DKTHCCPCAPABELLGSPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDDEVKFNWYVD 459
Db 366 DKTHCCPCAPABELLGSPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDDEVKFNWYVD 425

QY 460 GVEVNAKTRPREBOYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK 519
Db 426 GVEVNAKTRPREBOYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK 485
QY 520 GQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTIPPVLD 579
Db 486 GQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTIPPVLD 545
QY 580 DGSFFLYSKLTVDKSRMWOQGVFSCSVMHREALHNYTOKSLSLSPG 625
Db 546 DGSFFLYSKLTVDKSRMWOQGVFSCSVMHREALHNYTOKSLSLSPG 591

RESULT 30
US-10-282-162-8

; Sequence 8, Application US/10282162
; Publication No. US20030143697A1
; GENERAL INFORMATION:
; APPLICANT: REGENERON PHARMACEUTICALS, INC.
; TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
; TITLE OF INVENTION: AND USING
; FILE REFERENCE: REG 203-B-US
; CURRENT APPLICATION NUMBER: US/10/282,162
; CURRENT FILING DATE: 2002-10-28
; PRIOR APPLICATION NUMBER: 09/787,835
; PRIOR FILING DATE: 1999-09-22
; PRIOR APPLICATION NUMBER: PCT/US99/22045
; PRIOR FILING DATE: 1999-09-22
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 592
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-282-162-8

Query Match 38.7%; Score 1320; DB 14; Length 592;
Best Local Similarity 48.3%; Pred. No. 2.4e-84;
Matches 312; Conservative 53; Mismatches 161; Indels 120; Gaps 18;

QY 20 PAATQGNKVVLGKGDVVELTCTASQ-KKSTQFHWKNSNQKIANGOSFLTGPCKIND 78
Db 26 PAQEVARGVLTSLPBGDSVTLTCPEVPEPDNATVHW-----VLRKPA----- 66
QY 79 RADSRRLMDQGNFPLIKNKIEDSDTYICE-----VEDQKEVQLLVFGLT 126
Db 67 -AGSHPRMAGMGRLLRLRSVQLHDSGNYSCYRAGRPAQVYHLLVDVPEEPQLSCFRKS 125
QY 127 ANSDTHLLQGOSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWCTV 186
Db 126 PLSN-----VCEMGPRSTPSLTTKA-----VLLVRKFQNSPAEDFQPC 165
QY 187 LQNGKVEFKIDIVVLAFOKASSIYKKEGEOVESFPLAFTVEKLTGSGEL----- 238
Db 166 QYSQESQKFSQCLAVPEGDSFYIVSMCVASSVSKSKSTQTFQ---GCGILOPDPANI 222
QY 239 -----W-----MOABRASSSKSW-ITFDLKNKEVSVKRYQDPKLOMGKLLPLLT 283
Db 223 TVTVAARPRMLSTWQDPHSMNSFYRLRFLRYRABRSKFTF---TMWVKDLOHHCV 278
QY 284 LPOALPOYAGSGNLTALAEAKTGKLEOVNLVVMKATOLQKNLTCEVWGPTSPKLMSLK 343
Db 279 IH-----DAMSGLRH-----VQQLRA---QEEFGQGESEWSPEAMGTPW 315
QY 344 LENK-----EAKVSKREKRPVWVLANPEAGMOCCLSDSGOVLLESNIKVLPTMSTVEPESC 399
Db 316 TESRSPPAENEVS---TPMQALTTNKDDNLTFRDS-----ANATSLPVODAG-EPKSC 365
QY 400 DKTHCCPCAPABELLGSPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDDEVKFNWYVD 459
Db 366 DKTHCCPCAPABELLGSPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDDEVKFNWYVD 425
QY 460 GVEVNAKTRPREBOYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK 519

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Db      426 GVEVHNAKTPREBOYNSTRVSVLTVLHODMLNKEYCKVSNKALPAPIEKTISKAK 485
QY      520 GGPREFQVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVEMSNQPPENNYKTPPVLD 579
Db      486 GGPREFQVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVEMSNQPPENNYKTPPVLD 545
QY      580 DGSFFLYSKLTVDKSRMOQGNVFCGVMEALHNHYTKSLSPG 625
Db      546 DGSFFLYSKLTVDKSRMOQGNVFCGVMEALHNHYTKSLSPG 591

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RESULT 31
US-10-207-655-345
; Sequence 345, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden-Ledbetter, Martha S.
; TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
; FILE REFERENCE: 390069, 401C1
; CURRENT APPLICATION NUMBER: US/10/207,655
; CURRENT FILING DATE: 2002-07-25
; NUMBER OF SEQ ID NOS: 426
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 345
; LENGTH: 543
; TYPE: PRF
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion polypeptide
US-10-207-655-345

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Query Match      38.6%; Score 1319; DB 14; Length 543;
Best Local Similarity 47.6%; Pred. No. 2,5e-84;
Matches 304; Conservative 43; Mismatches 112; Indels 180; Gaps 17;

QY      1 NMRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKSIQFHKNSNQIK 60
Db      19 MSRGVD-----IVL-----TQSPPTIASPGEKVITTCRASSSVSYMYVQKSS--- 62
QY      61 ILGNQGSFLTKGSPKLNDRADSRSLMDQ--NFPILIKMLKIEDSDTYICEVEDQKEVQ 119
Db      63 --GASPKLMIYDTSKLASGVNRFSGSGSGTSYSLAINTMETEDATATYCC----- 111
QY      120 LLVFGLTANSDFHLQGGSLTTLTLESPSSPSVQCRSPRGKNIQGGKTLVSQLELQDS 179
Db      112 -----QMSSTPLTF---GSGTKLEIKRGGSGSGGSGGSGGSGGSGGSGGSGG 152
QY      180 G-----TWCTVLQNKQKVEFKIDIVVLAQKASSIYKKGEQVEFSPLAFV 229
Db      153 GEGVLQPTQTLSLTCTV-----SGFS----- 173
QY      230 EKLTSGGELMWOAERASSSKSWITFDLKNKEVSVKRVTQDPKLOMGKCLPLHLTLPOALP 289
Db      174 --LTSDGVHW-----IRQPP-----GKGLEW-----MGII 196
QY      290 QVAGSGLNLTLAEAKTGKLGHOEVNLVWMRATOLQKNLTCEVWGPTSPKMLMSLKLENKEA 349
Db      197 YVDGGTDYNSAIKSR-----LSISRDTs-----KSQVFLKINSIQ- 231
QY      350 KVSKEKEPVWVNLNPEAGMOCQ---LSDSGOVLESNIKIVLPTWSTPVPKSCDTHHCP 406
Db      232 -----TDDTAMYYCARIHFDYWGQ-----GAWVTYSSDDEPKSCDTHHCP 272
QY      407 PCPAPELLGGPSVFLFPPKPKDITLMISTRPEVTCVVDVSHEDPEVKFNMYVDGVEVNA 466
Db      273 PCPAPELLGGPSVFLFPPKPKDITLMISTRPEVTCVVDVSHEDPEVKFNMYVDGVEVNA 332
QY      467 KTKPREBOYNSTRVSVLTVLHODMLNKEYCKVSNKALPAPIEKTISKAKGQPREBO 526
Db      333 KTKPREBOYNSTRVSVLTVLHODMLNKEYCKVSNKALPAPIEKTISKAKGQPREBO 392

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QY      527 VYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVEMSNQPPENNYKTPPVLDSDGSFLY 586
Db      393 VYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVEMSNQPPENNYKTPPVLDSDGSFLY 452
QY      587 SKLTVDKSRMOQGNVFCGVMEALHNHYTKSLSPG 625
Db      453 SKLTVDKSRMOQGNVFCGVMEALHNHYTKSLSPG 491

RESULT 32
US-10-207-655-344
; Sequence 344, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden-Ledbetter, Martha S.
; TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
; FILE REFERENCE: 390069, 401C1
; CURRENT APPLICATION NUMBER: US/10/207,655
; CURRENT FILING DATE: 2002-07-25
; NUMBER OF SEQ ID NOS: 426
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 344
; LENGTH: 492
; TYPE: PRF
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion polypeptide
US-10-207-655-344

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Query Match      38.5%; Score 1316; DB 14; Length 492;
Best Local Similarity 47.6%; Pred. No. 3,6e-84;
Matches 304; Conservative 42; Mismatches 113; Indels 180; Gaps 17;

QY      1 NMRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKSIQFHKNSNQIK 60
Db      19 MSRGVD-----IVL-----TQSPPTIASPGEKVITTCRASSSVSYMYVQKSS--- 62
QY      61 ILGNQGSFLTKGSPKLNDRADSRSLMDQ--NFPILIKMLKIEDSDTYICEVEDQKEVQ 119
Db      63 --GASPKLMIYDTSKLASGVNRFSGSGSGTSYSLAINTMETEDATATYCC----- 111
QY      120 LLVFGLTANSDFHLQGGSLTTLTLESPSSPSVQCRSPRGKNIQGGKTLVSQLELQDS 179
Db      112 -----QMSSTPLTF---GSGTKLEIKRGGSGSGGSGGSGGSGGSGGSGGSGG 152
QY      180 G-----TWCTVLQNKQKVEFKIDIVVLAQKASSIYKKGEQVEFSPLAFV 229
Db      153 GEGVLQPTQTLSLTCTV-----SGFS----- 173
QY      230 EKLTSGGELMWOAERASSSKSWITFDLKNKEVSVKRVTQDPKLOMGKCLPLHLTLPOALP 289
Db      174 --LTSDGVHW-----IRQPP-----GKGLEW-----MGII 196
QY      290 QVAGSGLNLTLAEAKTGKLGHOEVNLVWMRATOLQKNLTCEVWGPTSPKMLMSLKLENKEA 349
Db      197 YVDGGTDYNSAIKSR-----LSISRDTs-----KSQVFLKINSIQ- 231
QY      350 KVSKEKEPVWVNLNPEAGMOCQ---LSDSGOVLESNIKIVLPTWSTPVPKSCDTHHCP 406
Db      232 -----TDDTAMYYCARIHFDYWGQ-----GAWVTYSSDDEPKSCDTHHCP 272
QY      407 PCPAPELLGGPSVFLFPPKPKDITLMISTRPEVTCVVDVSHEDPEVKFNMYVDGVEVNA 466
Db      273 PCPAPELLGGPSVFLFPPKPKDITLMISTRPEVTCVVDVSHEDPEVKFNMYVDGVEVNA 332
QY      467 KTKPREBOYNSTRVSVLTVLHODMLNKEYCKVSNKALPAPIEKTISKAKGQPREBO 526
Db      333 KTKPREBOYNSTRVSVLTVLHODMLNKEYCKVSNKALPAPIEKTISKAKGQPREBO 392
QY      527 VYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVEMSNQPPENNYKTPPVLDSDGSFLY 586
Db      393 VYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVEMSNQPPENNYKTPPVLDSDGSFLY 452

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QY 587 SKLTVDKSRMOQGNVFCSCVMHEALHNHYTOKSLSLSPG 625
DB 453 SKLTVDKSRMOQGNVFCSCVMHEALHNHYTOKSLSLSPG 491

RESULT 33
US-10-363-427-14

Sequence 14, Application US/10363427
Publication No. US20030195538A1
GENERAL INFORMATION:
APPLICANT: Medexgen Inc.
APPLICANT: CHUNG, Yong Hoon
APPLICANT: HAN, Ji Woong
APPLICANT: LEE, Hye Ja
APPLICANT: CHOI, Eun Yong
APPLICANT: KIM, Jin Mi
APPLICANT: YIM, Soo Bin
TITLE OF INVENTION: Concatametric Immunoadhesion
FILE REFERENCE:
CURRENT APPLICATION NUMBER: US/10/363,427
CURRENT FILING DATE: 2003-02-28
NUMBER OF SEQ ID NOS: 52
SOFTWARE: Kopatentin 1.71
SEQ ID NO 14
LENGTH: 437
TYPE: PRT
ORGANISM: Homo sapiens
US-10-363-427-14

Query Match 38.5%; Score 1313.5; DB 14; Length 437;
Best Local Similarity 79.7%; Pred. No. 4,6e-84;
Matches 255; Conservative 19; Mismatches 37; Indels 9; Gaps 5;

QY 307 KLHGVNVLVWRAIOLQKLTCEVWGPTSPKMLSLKLENKAKVSKR-KPVWVLANEA 365
DB 125 KIQEVSFKPKISWTCINTLTCEVWNGTDPK-LNLVODGKMLKLSQHVITHKWTSLSA 182
QY 366 GMMOCLDSGQVLESNIKVLPTWSTVEPKSCDKHTCPCPAPPELLGGPSVFLPFPK 425
DB 193 -KFKC--TAGNKVSKESSEVPEV--SCPAEPKSCDKHTCPCPAPPELLGGPSVFLPFPK 236
QY 426 PKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKRREQDYNSTYRVSVL 485
DB 237 PKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKRREQDYNSTYRVSVL 296
QY 486 TVLHODMNLGKREYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLT 545
DB 297 TVLHODMNLGKREYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLT 356
QY 546 CLVKGFPYSDIAVEMESNGQPENNYKTTIPVLDSDGSFFLYSKLTVDKSRMOQGNVFCSC 605
DB 357 CLVKGFPYSDIAVEMESNGQPENNYKTTIPVLDSDGSFFLYSKLTVDKSRMOQGNVFCSC 416
QY 606 VMHEALHNHYTOKSLSLSPG 625
DB 417 VMHEALHNHYTOKSLSLSPG 436

RESULT 34
US-10-207-655-348

Sequence 348, Application US/10207655
Publication No. US20030118592A1
GENERAL INFORMATION:
APPLICANT: Ledbetter, Jeffrey A.
APPLICANT: Hayden-Ledbetter, Martha S.
TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
FILE REFERENCE: 390069, 401C1
CURRENT APPLICATION NUMBER: US/10/207,655
CURRENT FILING DATE: 2002-07-25
NUMBER OF SEQ ID NOS: 426
SOFTWARE: PatentIn version 3.0
SEQ ID NO 348

LENGTH: 504
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion polypeptide
US-10-207-655-348

Query Match 38.5%; Score 1313; DB 14; Length 504;
Best Local Similarity 48.1%; Pred. No. 6e-84;
Matches 306; Conservative 45; Mismatches 123; Indels 162; Gaps 18;

QY 1 MNRGVPFRHLIVLQLALLPAATQGNKVLGKKDTELTCTASQKSIQHN--KNSN 57
DB 19 MSRGVDIQ-----MTQTSSLASLSDRVTISCRASQDTRNYLWYQOKRPG 65
QY 58 QIKILGNQGSFLTPKPSKLNDRADSRSLMDQG-NFLILIKNLTEDSDPTICEVEQKE 116
DB 66 TVKLL---IYLT---SRLSGVSPRSGSGSGSDYSLTIANLQPEDIAITFCQ----- 112
QY 117 EVQLVLEGLTANSPDTHLQGSLLTLTLESPGSSPSYQCRSPRGKNIQGGKT--LSVSQ 173
DB 113 -----QNTLPMTF---GGTKLVTKRELGGSGSGSGSGGSGGSGIDE 151
QY 174 LEIQDGTWTCTYVLQNKQKVEFKIDIVLAFQKASIVYKKEGQVEPFLATVEKLT 233
DB 152 VQLQSGP-----ELV---KPGASMSCRASG---YSF-TGYIVN--- 183
QY 234 GSGELMWQAEBAASSKSMITFDLKNKEVSRYVQDPKLOMKKPLHLTLPLQALPYAG 293
DB 184 -----MKOSHGNLEWIGLINDPKLT---TYNOKFK----- 213
QY 294 SGNLTLLAEAKTKLHGVNVLVWRAIOLQKLTCEVWGPTSPKMLSLKLENKAKVSK 353
DB 214 -GKATLTVDKSSSTAYNE-----LSTSE----- 237
QY 354 REKPVWVLANPBAKGMQCLLS---DSGQVLESNIKVLPTWSTVEPKSCDKHTCPCP 409
DB 238 -----DSAVYCARSGYDSDMYPDWAGTIVTVSSQPEPKSCDKHTCPCP 287
QY 410 APPELLGGPSVFLPFPKDKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTK 469
DB 288 APPELLGGPSVFLPFPKDKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTK 347
QY 470 PREQYNSTYRVSVLTVLHODMNLGKREYKCKVSNKALPAPIEKTISKAKGQPREPQVY 529
DB 348 PREQYNSTYRVSVLTVLHODMNLGKREYKCKVSNKALPAPIEKTISKAKGQPREPQVY 407
QY 530 LPSPRDELTKNQVSLTCLVKGFPYSDIAVEMESNGQPENNYKTTIPVLDSDGSFFLYSKL 589
DB 408 LPSPRDELTKNQVSLTCLVKGFPYSDIAVEMESNGQPENNYKTTIPVLDSDGSFFLYSKL 467
QY 590 TVDKSRMOQGNVFCSCVMHEALHNHYTOKSLSLSPG 625
DB 468 TVDKSRMOQGNVFCSCVMHEALHNHYTOKSLSLSPG 503

RESULT 35
US-09-815-108-22

Sequence 22, Application US/09815108
Patent No. US20020009776A1
GENERAL INFORMATION:
APPLICANT: Saris, Christiaan M.
APPLICANT: Sharon, Mu X.
APPLICANT: Xia, Min
APPLICANT: Boone, Thomas Charles
APPLICANT: Covey, Todd
TITLE OF INVENTION: Fibroblast Growth Factor Receptor-like Molecules and
FILE REFERENCE: 99-513-A
CURRENT APPLICATION NUMBER: US/09/815,108
CURRENT FILING DATE: 2001-03-22
PRIOR APPLICATION NUMBER: 60/191,379
PRIOR FILING DATE: 2000-03-22


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FILE REFERENCE: D0003NP
CURRENT APPLICATION NUMBER: US/09/910,600
CURRENT FILING DATE: 2001-07-20
PRIOR APPLICATION NUMBER: 60/220,139
PRIOR FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 32
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 16
LENGTH: 779
TYPE: PR
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: L3-hlg
US-09-910-600-16

Query Match      38.3%; Score 1306; DB 10; Length 779;
Best Local Similarity 46.0%; Pred. No. 3.4e-83;
Matches 308; Conservative 43; Mismatches 137; Indels 182; Gaps 18;

QY 8 RHLVLVQLALPA--ATQGNKVL--GKKGDTVELCTTASQKSIQFHKNSNQIKILG 63
DB 239 RDLVISISDNTPALBPQGNVPLYBAQKGQFLRLCAADSGPATLSM----- 288
QY 64 NQGSFLTKGPSKLNDRADSRSLWDQGNFPLIINKIKIEDSTYICEVEDQ----- 114
DB 289 -----VLQNRVLSSHPWGPRLGLPLGVKAGDSGRYTCRAENRLGSGQORALD 337
QY 115 -----KEEVOLLVF-----GLTANDTHLQOGSLTL--TLSPGSSPSVQCRS 157
DB 338 LSVQVPEPLRWVWSQANRTVLNGLNGLSLPVLBGQSLCLVCTHSSPPA----- 388
QY 158 PRGKNIOGKTLVSQ-----LELDGSTMCTVLQNKVFEKIDIVLAFQK 206
DB 389 -RLSTMQRQGVLSPSQSPDPGVLELPRVQVHEGEFTCHAR----- 428
QY 207 ASSIYKKEGEQVESFPPLAFVEKLTGSGELM-----WQERASSSKSWITFDL 256
DB 429 -----HPLGSGHVSLSLSVHS-PKLLGPSCSWEAEGHLCSSQASPAISRWWL---- 478
QY 257 KKEKESVAKVTDQPKLQMGKULPLHLTLRQALPQVAGS-GNLTALAEATGKLHQBVLV 315
DB 479 -GEELLEGNSQDSF-----EVTPESSAGPWANSSLSLH---GGLSSGL--- 517
QY 316 VNRATQLOKMLTCEVWGPTSPKLMLSKLENKEAKVSKREKPVWVLNPEAGMMQCLLSDS 375
DB 518 -----RLRCEANVNHGAQSGSILQLPDKKG-----LISDP 547
QY 376 GQVLESNIKVLPTWSTPVEPKSCDKTHTCPPCPAPELLGSPVFLFPKPKDTLMISRT 435
DB 548 -----EPKSCDKTHTCPPCPAPEFGAPSVFLFPKPKDTLMISRT 588
QY 436 PEVTCVVVDVSHEDPEVKRMYVDGVEVHNAAKTRPEEQNSTYRVVSVLTVLHDQWNLG 495
DB 589 PEVTCVVVDVSHEDPEVKRMYVDGVEVHNAAKTRPEEQNSTYRVVSVLTVLHDQWNLG 648
QY 496 KEYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSD 555
DB 649 KEYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSD 708
QY 556 IAVEWESNGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRWQGNVFCSVNHEALHNHY 615
DB 709 IAVEWESNGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRWQGNVFCSVNHEALHNHY 768
QY 616 TOKSLSLSPG 625
DB 769 TOKSLSLSPG 778
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RESULT 40
US-09-910-600-30
Sequence 30, Application US/09910600
Publication No. US2003003631A1
GENERAL INFORMATION:
```

```
APPLICANT: Longphre, Malinda
APPLICANT: Chang, Han
APPLICANT: Whitney, Gena
TITLE OF INVENTION: NOVEL SIGLECS AND USES THEREOF
FILE REFERENCE: D0003NP
CURRENT APPLICATION NUMBER: US/09/910,600
CURRENT FILING DATE: 2001-07-20
PRIOR APPLICATION NUMBER: 60/220,139
PRIOR FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 32
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 30
LENGTH: 779
TYPE: PR
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: L3-hlg
US-09-910-600-30
```

```
Query Match      38.3%; Score 1306; DB 10; Length 779;
Best Local Similarity 46.0%; Pred. No. 3.4e-83;
Matches 308; Conservative 43; Mismatches 137; Indels 182; Gaps 18;

QY 8 RHLVLVQLALPA--ATQGNKVL--GKKGDTVELCTTASQKSIQFHKNSNQIKILG 63
DB 239 RDLVISISDNTPALBPQGNVPLYBAQKGQFLRLCAADSGPATLSM----- 288
QY 64 NQGSFLTKGPSKLNDRADSRSLWDQGNFPLIINKIKIEDSTYICEVEDQ----- 114
DB 289 -----VLQNRVLSSHPWGPRLGLPLGVKAGDSGRYTCRAENRLGSGQORALD 337
QY 115 -----KEEVOLLVF-----GLTANDTHLQOGSLTL--TLSPGSSPSVQCRS 157
DB 338 LSVQVPEPLRWVWSQANRTVLNGLNGLSLPVLBGQSLCLVCTHSSPPA----- 388
QY 158 PRGKNIOGKTLVSQ-----LELDGSTMCTVLQNKVFEKIDIVLAFQK 206
DB 389 -RLSTMQRQGVLSPSQSPDPGVLELPRVQVHEGEFTCHAR----- 428
QY 207 ASSIYKKEGEQVESFPPLAFVEKLTGSGELM-----WQERASSSKSWITFDL 256
DB 429 -----HPLGSGHVSLSLSVHS-PKLLGPSCSWEAEGHLCSSQASPAISRWWL---- 478
QY 257 KKEKESVAKVTDQPKLQMGKULPLHLTLRQALPQVAGS-GNLTALAEATGKLHQBVLV 315
DB 479 -GEELLEGNSQDSF-----EVTPESSAGPWANSSLSLH---GGLSSGL--- 517
QY 316 VNRATQLOKMLTCEVWGPTSPKLMLSKLENKEAKVSKREKPVWVLNPEAGMMQCLLSDS 375
DB 518 -----RLRCEANVNHGAQSGSILQLPDKKG-----LISDP 547
QY 376 GQVLESNIKVLPTWSTPVEPKSCDKTHTCPPCPAPELLGSPVFLFPKPKDTLMISRT 435
DB 548 -----EPKSCDKTHTCPPCPAPEFGAPSVFLFPKPKDTLMISRT 588
QY 436 PEVTCVVVDVSHEDPEVKRMYVDGVEVHNAAKTRPEEQNSTYRVVSVLTVLHDQWNLG 495
DB 589 PEVTCVVVDVSHEDPEVKRMYVDGVEVHNAAKTRPEEQNSTYRVVSVLTVLHDQWNLG 648
QY 496 KEYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSD 555
DB 649 KEYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSD 708
QY 556 IAVEWESNGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRWQGNVFCSVNHEALHNHY 615
DB 709 IAVEWESNGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRWQGNVFCSVNHEALHNHY 768
QY 616 TOKSLSLSPG 625
DB 769 TOKSLSLSPG 778
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RESULT 41
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US-10-412-406-32
; Sequence 32, Application US/10412406
; Publication No. US20040058394A1
; GENERAL INFORMATION:
; APPLICANT: BIOGEN, INC.
; APPLICANT: GARBER, Ellen
; APPLICANT: LYNE, Paul
; APPLICANT: SALDHANA, Jose W.
; TITLE OF INVENTION: HUMANIZED ANTI-LT-BETA-R ANTIBODIES
; FILE REFERENCE: BINA100CN
; CURRENT APPLICATION NUMBER: US/10/412,406
; CURRENT FILING DATE: 2003-04-10
; PRIOR APPLICATION NUMBER: 60/240,285
; PRIOR FILING DATE: 2000-10-13
; PRIOR APPLICATION NUMBER: 60/275,289
; PRIOR FILING DATE: 2001-03-13
; PRIOR APPLICATION NUMBER: 60/299,987
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: PCT/US01/32140
; PRIOR FILING DATE: 2001-10-12
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 32
; LENGTH: 663
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-412-406-32

Query Match      38.2%; Score 1304.5; DB 12; Length 663;
Best Local Similarity 48.7%; Pred. No. 3.5e-83;
Matches 305; Conservative 50; Mismatches 150; Indels 121; Gaps 19;

QY 33 KQDTVELTCTAQ--KKSIQPHMKNSNQIKILNGSGFLTKGPKSLNDRASRSLTMDG 90
DB 126 KSGTAVVCLLNFTPREAKVQMKVDNAQ--SGNSQESVTEBDSK-----DSTYSL----- 175
QY 91 NEPLTIKMLKIEDSDTYICEVEDQKEVQLVFGLTANSDDLQSGSLTTLTLES----- 145
DB 176 SSTLILSKADYDKHKHVAACEVTHQ-----GLSSPYTKS FNNGBEVOQLVESGGGLV 226
QY 146 PGGSSPSVQC-----RSPRGKNIQGGKTLVSQLELDQSGTWT----- 183
DB 227 KFGGSLRLSCASGFTPSDYVMWFRQAPGKGLFWATIS-----DGGSYTYPDSSVK 279
QY 184 --CTVLQNGKKEFEKIDIVLAFQKASIVYKKEGEQVFFPLAFYTEKLTGSELIMQ 241
DB 280 GRTTISRDANKSLYLQSSSLRAED--TAVYYCAREENGIFY-----FDYWGQ 326
QY 242 AERASSSSKSWITFDLKNKEVSKRYTQDPKLOMGKKLPLHLTLPOALQVAGSGNLTAL 301
DB 327 GTTVVSSA-----STKQPSVFPPLAPSSKSTSGGTALGCLVKQYFPE-----PVTY 373
QY 302 EAKTGLKHOEVNL--VVMRATQLQKLTCEWGPPTSFKLMLSLKLENKAKYKREKPVW 359
DB 374 SWSNGALTSQVHTPAVLQSSGLY--SLSSVTVPPSS-----SLGTQYICNVN--HKP-- 423
QY 360 VLNPEAGMWQCCLSDSGVLLSNNIKVLPWSTVPEPKSCDTHTCPCPPABELLGGSSV 419
DB 424 -----SNTKV-----DKKVEPKSCDTHTCPCPPABELLGGSSV 457
QY 420 FLPEPKPKDTLMISRTPEVTCVVAVVSHEDPEVKFNWYVDGVEVNAKTKPREEQYNSTY 479
DB 488 FLPEPKPKDTLMISRTPEVTCVVAVVSHEDPEVKFNWYVDGVEVNAKTKPREEQYNSTY 517
QY 480 RVVSVLTVLHQMNLNGEKYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTK 539
DB 538 RVVSVLTVLHQMNLNGEKYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTK 577
QY 540 NOVSLTCLVKGFPYPSDIAVEMESNGQPENNYKTTPPVLDSDGSFPLYSKLTVDKSRMNOG 599
DB 578 NOVSLTCLVKGFPYPSDIAVEMESNGQPENNYKTTPPVLDSDGSFPLYSKLTVDKSRMNOG 637
QY 600 NVFSCSVNHEALHNHYTQKSLSLSPG 625

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DB 638 NVFSCSVNHEALHNHYTQKSLSLSPG 663

RESULT 42
US-09-773-877A-14
; Sequence 14, Application US/09773877A
; Publication No. US20030017977A1
; GENERAL INFORMATION:
; APPLICANT: Xia, Yu-Ping et al.
; TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES
; FILE REFERENCE: REG 710B
; CURRENT APPLICATION NUMBER: US/09/773,877A
; CURRENT FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 14
; LENGTH: 557
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Filt(1-3 deltab) -Fc (Muc1)
US-09-773-877A-14

Query Match      38.2%; Score 1302.5; DB 12; Length 557;
Best Local Similarity 48.3%; Pred. No. 3.8e-83;
Matches 300; Conservative 55; Mismatches 119; Indels 147; Gaps 22;

QY 85 SLMDQGFPLTIKMLKIEDSDTYICEVEDQKEVQLVFGLTANSDDLQ--GQSLTTL 143
DB 3 SYMDTGVLCLLSCLLTLTGSSSGSKLKDPE-----LSLKGTHIMQAGQTLHL-- 51
QY 144 ESPGSSPSVQCR-----SPRGKNIQGGK-----TTSVQLE 175
DB 52 -----QCKEAAHKMSLPEMWSKESERLSTTSACGRN--GKQFSTLTTLTAQ 98
QY 176 LDQSGTCTCYL-----ONOKKVEFKIDI-----VLAFOKASIVYKKEGEVERSF 223
DB 99 ANHIGFSCRYKLANPYSKKETESAIYIFISDGRPFVEMYSLEIIMHTEGR--ELVI 156
QY 224 PLATVEKLT-----GSGELMWQAEARASSKSWITFDLKNKEVSKRYTQD 269
DB 157 PCRYTSSNITVTLKKFPLDLTLPDGKRIW-----DSRKGFITSNATYKEIGL----- 204
QY 270 PKLOMGKKLPLHLTLPOALQVAGSGNLTALAEKTKL--HGEVNLV-----MRATQL 322
DB 205 -----LTCERTV-----NGHL-----YKTYLTHRQNTIITDVOISTPRPVKL 242
QY 323 QKN-----LTCWNGPSTPKMLLS-----LKLLENKAK-----VSKREKPVWVLNPEA 365
DB 243 LRGHITVLNCTATPLNTRVQMTWSPYDELDQSHANIFYSVLTLIDMQ-----NKDK 296
QY 366 GMMQCLLSDSGQVLLSNNIKV--LPTWSTVPEPKSCDTHTCPCPPABELLGGSPVFLFP 424
DB 297 GLYTCGRVR--SGSPSKSVNTSVHIVDKAGPCKSCDTHTCPCPPABELLGGSPVFLFP 355
QY 425 KPKDTLMISRTPEVTCVVAVVSHEDPEVKFNWYVDGVEVNAKTKPREEQYNSTYRVVSV 484
DB 356 KPKDTLMISRTPEVTCVVAVVSHEDPEVKFNWYVDGVEVNAKTKPREEQYNSTYRVVSV 415
QY 485 LTVLHQMNLNGEKYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNOVSL 544
DB 416 LTVLHQMNLNGEKYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNOVSL 475
QY 545 TCLVKGFPYPSDIAVEMESNGQPENNYKTTPPVLDSDGSFPLYSKLTVDKSRMNOGQNVFSC 604
DB 476 TCLVKGFPYPSDIAVEMESNGQPENNYKTTPPVLDSDGSFPLYSKLTVDKSRMNOGQNVFSC 535
QY 605 SVMHEALHNHYTQKSLSLSPG 625
DB 536 SVMHEALHNHYTQKSLSLSPG 556

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Qy 596 WOQGNVFCSCVWHEALHNHYTQKSLSPG 625
Db 450 WOQGNVFCSCVWHEALHNHYTQKSLSPG 479

RESULT 45
US-10-077-023-5
; Sequence 5, Application US/10077023
; Publication No. US20030031675A1
; GENERAL INFORMATION:
; APPLICANT: MIKESSELL, GLEN E.
; APPLICANT: CHANG, HAN
; APPLICANT: FINGER, JOSHUA N.
; APPLICANT: YANG, GUCHEN
; APPLICANT: LU, PIN
; APPLICANT: ZHOU, XIA-DI
; APPLICANT: PEACH, ROBERT
; TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
; FILE REFERENCE: 3053-4071US3
; CURRENT APPLICATION NUMBER: US/10/077,023
; PRIOR FILING DATE: 2001-02-28
; PRIOR APPLICATION NUMBER: 60/209,811
; PRIOR FILING DATE: 2000-06-06
; NUMBER OF SEQ ID NOS: 138
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
; LENGTH: 480
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; US-10-077-023-5

Query Match 38.0%; Score 1298.5; DB 14; Length 480;
Best Local Similarity 62.7%; Pred. No. 5,9e-83;
Matches 282; Conservative 32; Mismatches 81; Indels 55; Gaps 16;

Qy 219 VEFSEPLAFYVEKLTGSGEL--WQAEKASSKSWITF----DIKKEVSK--RYTQ 268
Db 42 IECKP-----VEKQDLALIVYEME----DKNIQFVHGHEDLKVQHSYGRARILK 93
Qy 269 DPKLQMKKLLPLHL-----LPQALPOVAGSG--NLTLALEKTKGKLHGVNLVYMR 318
Db 94 D-QUSLG--NAALQITDVKLQADGVYRCMIYGGADYKRITVKNAPYNNKINQRI-LVVD 150
Qy 319 ATQLQKNTLCEVWG-PTSPKMLSLKLENKEAKV----SKREKPYW-----VLNPEAG 366
Db 151 VTS-EHELTLQAEQFKAEVITWSSDHQVLSGKTTTNSKGEKLFNTSTLRINTTNE 209
Qy 367 MWQCL---LSDSGOVLLSNIKVL-----TWSTVEPKSCDKTHTCPCPAPELLG 415
Db 210 IFYCFRRLDEENHTAELVIPLELPAHPNERTGDDEEPKSCDKTHTCPCPAPELLG 269
Qy 416 GPSVFLFPKPKDPTLMISRTPEVTCVVVDVSHEDDEVFNMYVGVENNAKTKPREBOY 475
Db 270 GPSVFLFPKPKDPTLMISRTPEVTCVVVDVSHEDDEVFNMYVGVENNAKTKPREBOY 329
Qy 476 NSTYRVSVLTJVLHODMLNGKEKCVSNKALPAIEKTISSAKQPREPOVYTLTPSRD 535
Db 330 NSTYRVSVLTJVLHODMLNGKEKCVSNKALPAIEKTISSAKQPREPOVYTLTPSRD 389
Qy 536 ELTKXQVSLTCLVKGFPYSDIAVEMESNGQPENNYKTPPVLDSDGSFLLYSKLTVDKSR 595
Db 390 ELTKXQVSLTCLVKGFPYSDIAVEMESNGQPENNYKTPPVLDSDGSFLLYSKLTVDKSR 449
Qy 596 WOQGNVFCSCVWHEALHNHYTQKSLSPG 625
Db 450 WOQGNVFCSCVWHEALHNHYTQKSLSPG 479

RESULT 46
US-09-875-338-17
; Sequence 17, Application US/09875338
; Patent No. US20020095024A1
; GENERAL INFORMATION:
; APPLICANT: MIKESSELL, GLEN E.
; APPLICANT: CHANG, HAN
; APPLICANT: FINGER, JOSHUA N.
; APPLICANT: YANG, GUCHEN
; APPLICANT: LU, PIN
; APPLICANT: ZHOU, XIA-DI
; APPLICANT: PEACH, ROBERT
; TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
; FILE REFERENCE: 3053-4071US2
; CURRENT APPLICATION NUMBER: US/09/875,338
; CURRENT FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: 60/272,107
; PRIOR FILING DATE: 2001-02-28
; PRIOR APPLICATION NUMBER: 60/209,811
; PRIOR FILING DATE: 2000-06-06
; NUMBER OF SEQ ID NOS: 94
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 17
; LENGTH: 451
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; US-09-875-338-17

Query Match 37.9%; Score 1294.5; DB 9; Length 451;
Best Local Similarity 51.5%; Pred. No. 1e-82;
Matches 280; Conservative 48; Mismatches 77; Indels 139; Gaps 15;

Qy 117 EVQL-----LVFGLTANSDTHLQ--GSLTTLTLESPPSSPSVQCRSPGRKNIQ----- 164
Db 11 ELQHQALAFYTVVPELVYIEHGSNVTLECNDRDTSNHLGATSLQKVEDNDSBHR 70
Qy 165 -----GKTLISVQLELDQSGTWTCTVLAQ---NKKVERKIDIVLAFOKAS 208
Db 71 ERATLEEOLPLGASPHIPIQOVVRDEGOYCIITIVVANDYKXLTLC--VKASYRKIN 127
Qy 209 SIYVK-KEGQVRS-----PLAFTVEKLTGSGELWQAEKASSKSWITFPLDKNEVS 262
Db 128 THIKVPEIPEVETLCOATGTPLA-----EVSW-----PNVS 159
Qy 263 VKRVTDPKLQMKKLLPLHLTLPLQALPOVAGSGNLTALAEKTKGKLHGVNLVYMRATOL 322
Db 160 VPANTS-----HRTPEGLQVTS---VLRLKPPG----- 187
Qy 323 QKNITCEVWGPTSPKML--SLKLENKEAKVSKREKPYWVLNPEAKMQCLSDSGQVLL 381
Db 188 -RNFSCVWNTVHVELTLASIDLSQ-----MEPR----- 216
Qy 382 SNIRVLTWSPVPEPKSCDKTHTCPCPAPELLGSPVFLPFPKPKDPTLMISRTPEVTCV 441
Db 217 -----TEPEPKSCDKTHTCPCPAPELLGSPVFLPFPKPKDPTLMISRTPEVTCV 266
Qy 442 VVDVSHEDPEVKFNMYVGVENNAKTKPREBOYNSYTRVVSVLTJVLHODMLNGKEYCK 501
Db 267 VVDVSHEDPEVKFNMYVGVENNAKTKPREBOYNSYTRVVSVLTJVLHODMLNGKEYCK 326
Qy 502 VSNKALPAIEKTISSAKQPREPOVYTLTPSRDELTKNOVSLTCLVKGFPYSDIAVEME 561
Db 327 VSNKALPAIEKTISSAKQPREPOVYTLTPSRDELTKNOVSLTCLVKGFPYSDIAVEME 386
Qy 562 SNGQPENNYKTPPVLDSDGSFLLYSKLTVDKSRWQGNVFCSCVWHEALHNHYTQKSL 621
Db 387 SNGQPENNYKTPPVLDSDGSFLLYSKLTVDKSRWQGNVFCSCVWHEALHNHYTQKSL 446

Qy 589 LTVDKSRWQGNVFCSCVMHEALHNHYTOKSLSPG 625
 Db 428 LTVDKSRWQGNVFCSCVMHEALHNHYTOKSLSPG 464

RESULT 49
 US-10-120-198B-2
 ; Sequence 2, Application US/10120198B
 ; Publication No. US20030215427A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Jensen, Michael
 ; TITLE OF INVENTION: CEF-SPECIFIC REDIRECTED IMMUNE CELLS
 ; FILE REFERENCE: 1954-337
 ; CURRENT APPLICATION NUMBER: US/10/120,198B
 ; CURRENT FILING DATE: 2002-04-11
 ; PRIOR APPLICATION NUMBER: 60/282,859
 ; PRIOR FILING DATE: 2001-04-11
 ; NUMBER OF SEQ ID NOS: 11
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 2
 ; LENGTH: 631
 ; TYPE: PRT
 ; ORGANISM: artificial sequence
 ; FEATURE:
 ; OTHER INFORMATION: mouse-human chimera
 US-10-120-198B-2

Query Match 37.9%; Score 1294.5; DB 15; Length 631;
 Best Local Similarity 46.5%; Pred. No. 1.6e-82;
 Matches 301; Conservative 46; Mismatches 111; Indels 189; Gaps 19;

Qy 5 VPRHLLVLOALLPATOGNKVVGKKDPVELTCTASQKSIQF--HM--KNSQI 59
 Db 13 LPHRFLIPVQLOQPAE-----LVKPGASVLSCLASGTFGYMMHWKQRPBGIL 67
 Qy 60 KILNQSGFLTKGPKLNDRAISRSLW-DQGNFP-LIINKLKIEDSDTYICEVEDQKE 116
 Db 68 EWIGRINP--SNGRITNERFESKATLTVDKSSTAFMQLSGLTSEDSAVYFCARD----- 121
 Qy 117 EVQLLVPLTANSDPHLLQGGSLTTLESPPSSSVQCRPRKNIQGGKTLVSQ--- 173
 Db 122 ----YGTSTNFD--YMGQSTLTIVSSGGGSGG-----GGSGGGSDDIQTOSSS 166
 Qy 174 ---LELDQSGTWCTVLQONQKVEFKIDIVLAFQKASSIYVKEGEQVEFSFLATFVE 230
 Db 167 SFSVSLGRVITC-----KANEI----- 186
 Qy 231 KLTSGLMWQAEKASSSSKSWITFDLKNKEVSVKRVTDQPKLQMGKPLHLTLPLQALPQ 290
 Db 187 ---NNRLAWYQQTGNS-----PRLISGATNLVTGVPS---R 218
 Qy 291 YAGSNLTLAEAKTGKHOEVNLVVMRATQLOKNTCEWGPSPKMLSLKLENKAK 350
 Db 219 FSGSG-----SGKDY-----TLTITSLQAE----- 238
 Qy 351 VSKREKPVWVLPBAGMOCLLSDGQVLLSNIKVLPTWSTP-----VEBK 398
 Db 239 -----DATYYC-----QQYMTPTFGSGTELEIKVEK 269
 Qy 399 CDKHTCPCPAPBELLGSPVFLPPPKPDITLMSRTPEVTCVVVDVSHEDPEVKFMY 458
 Db 270 SDKHTCPCPAPBELLGSPVFLPPPKPDITLMSRTPEVTCVVVDVSHEDPEVKFMY 329
 Qy 459 DGVENHNAKTPREQVNSTYRVSVLTVLHODMANGKEYCKVSNKALPAPIEKTISKA 518
 Db 330 DGVENHNAKTPREQVNSTYRVSVLTVLHODMANGKEYCKVSNKALPAPIEKTISKA 389
 Qy 519 KGQPREPOVYTLPRRDELTKNOVSLTCLVKGIFYSDIAYEWESNGQENNYKTTPLVD 578
 Db 390 KGQPREPOVYTLPRRDELTKNOVSLTCLVKGIFYSDIAYEWESNGQENNYKTTPLVD 449
 Qy 579 SDGSFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTOKSLSPG 625

Db 450 SDGSFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTOKSLSPG 496

RESULT 50
 US-10-207-655-240
 ; Sequence 240, Application US/10207655
 ; Publication No. US20030118592A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Ledbetter, Jeffrey A.
 ; APPLICANT: Hayden-Ledbetter, Martha S.
 ; TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
 ; FILE REFERENCE: 390069.401C1
 ; CURRENT APPLICATION NUMBER: US/10/207,655
 ; CURRENT FILING DATE: 2002-07-25
 ; NUMBER OF SEQ ID NOS: 426
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 240
 ; LENGTH: 500
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: fusion polypeptide
 US-10-207-655-240

Query Match 37.9%; Score 1293; DB 14; Length 500;
 Best Local Similarity 49.0%; Pred. No. 1.5e-82;
 Matches 300; Conservative 37; Mismatches 127; Indels 148; Gaps 18;

Qy 23 TQGNKVVLGKKGDPVELTCTASQKSIQFHWKNSNQIKIINGQSGFLTKGPKLNDRAIS 82
 Db 27 SQSPAILASPGKEKVTWTCRASSVS--YMHYQKP-----GSPKPIYAPSNLASGVPA 81
 Qy 83 RSLMDQ--NPLIINKLKIEDSDTYICEVEDQKEEVQLLVFGLTANSDPHLLQGGSLTL 141
 Db 82 RFGSGGSGTSLTISVEAEDATYYCQ-----QMSFPPTF--GAGTKL 125
 Qy 142 TLESPPSSSVQCRPRKNIQGGKTLVSQLELDQSGTWCTVLQONQKVEFKIDIV 201
 Db 126 ELKQGGSG-----GGSGGGS--SQAVLQSGA-----ELV- 156
 Qy 202 LAFQKASSIYVKEGEQVEFSFLATFVEKLTG---SGELMWQAEKASSSSKSWITFDL 257
 Db 157 -----REGASVKNWSC-----KASGYTFTSYNMHWKQTPROGLEWIG--- 193
 Qy 258 NKEVSVKRVTDQPKLQMGKPLHLTLPLQALPOYAGSGNLTALAEATGKHOEVNLVVM 317
 Db 194 -----AIPKNGDTSYNQKFK-GK----- 211
 Qy 318 RATQLOKNTCEWGPSPKMLSLKLENK-----AKVSKREKPVWVLPBAGMOCLLS 373
 Db 212 -----ATLTVDKSSSTAYVQLSLTSEDSAVYCAVVVYSNSYVFD---VM----- 256
 Qy 374 DSGQVLLSNIKVLPTWSTVEPKSCDKHTCPCPAPBELLGSPVFLPPPKPDITLMS 433
 Db 257 GTGTTV-----TVSSDOEPKSCDKHTCPCPAPBELLGSPVFLPPPKPDITLMS 307
 Qy 434 RTEPVTGVVVDVSHEDPEVKFMYVVDGVEVNAKTKREBOYNSTYRVSVLTVLHODWL 493
 Db 308 RTEPVTGVVVDVSHEDPEVKFMYVVDGVEVNAKTKREBOYNSTYRVSVLTVLHODWL 367
 Qy 494 NGKEYCKVSNKALPAPIEKTISKAKQPREPOVYTLPRRDELTKNOVSLTCLVKGIFY 553
 Db 368 NGKEYCKVSNKALPAPIEKTISKAKQPREPOVYTLPRRDELTKNOVSLTCLVKGIFY 427
 Qy 554 SDIAYEWESNGQENNYKTTPLVDSDGSFFLYSKLTVDKSRWQGNVFCSCVMHEALHN 613
 Db 428 SDIAYEWESNGQENNYKTTPLVDSDGSFFLYSKLTVDKSRWQGNVFCSCVMHEALHN 487
 Qy 614 HYTOKSLSPG 625
 Db 488 HYTOKSLSPG 499

```
RESULT 51
US-09-875-338-9
/ Sequence 9, Application US/09875338
/ Patent No. US20020095024A1
/ GENERAL INFORMATION:
/ APPLICANT: MIKESELL, GLEN E.
/ APPLICANT: CHANG, HAN
/ APPLICANT: FINGER, JOSHUA N.
/ APPLICANT: YANG, GUOCHEN
/ APPLICANT: LU, PIN
/ APPLICANT: ZHOU, XIA-DI
/ APPLICANT: BEACH, ROBERT
/ TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
/ FILE REFERENCE: 3053-4071US2
/ CURRENT APPLICATION NUMBER: US/09/875,338
/ CURRENT FILING DATE: 2001-06-06
/ PRIOR APPLICATION NUMBER: 60/272,107
/ PRIOR FILING DATE: 2001-02-28
/ PRIOR APPLICATION NUMBER: 60/209,811
/ PRIOR FILING DATE: 2000-06-06
/ NUMBER OF SEQ ID NOS: 94
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 9
/ LENGTH: 698
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-875-338-9

Query Match          37.9%; Score 1293; DB 9; Length 698;
Best Local Similarity 44.7%; Pred. No. 2,4e-82;
Matches 296; Conservative 56; Mismatches 122; Indels 188; Gaps 19;

QY 32 KKGDTVELTCTASQ-KKSIQFHWKNSNQIKILGNGSFLTKGPKSLNDRADRSRLMDG 90
DB 156 RRGDTVTITCSSYQGYPEAEVFWQDGGVPLTGN-----VTTSQMANEGG 200
QY 91 NFPL-IINKLKIEDSDTYICEVEDQEEVQLVFGLTANSPTDLLOGSLTTLTLESPP-- 147
DB 201 LFDVHSILRVLGANGTISC-----LVRNVLQGDH-----SSVTITPQRSFPG 245
QY 148 -----GSSPSVQCR-SP-----RGKN-- 162
DB 246 AVEVQVEDPVVALVGTDTALRCSFSPERGFSIAQLNIWQLTDTKQLVHSFTEGRDQS 305
QY 163 -----IOGKTLVSQLELDSGTWTCTV-LQNKQKVEFKIDIVVLAFOKAS 208
DB 306 AVANRTALFPDLLAQGNASLRQVRVVADEGSFTCVSIRDFGSAAVSLQVAAPYSKPSM 365
QY 209 STVYKKE---GEVVEFSPLAFTVEKLTG--SGELMWAERASSSKSWITFDLKNKEVS 263
DB 366 TLEPNKDLARPGDV-----TITCSSYRGYPEAEVFWQD----- 398
QY 264 KAVTDPKIQMGKQLRLHLTLPOALPOYAGSGNLTLALBAKTGKLHQEVNLVVMRATOLQ 323
DB 399 -----GQGVPL-----TGNVTTSQMANEGGLF-DVHSVLRVVLGAN 433
QY 324 KNLTCGVMPGTPSKMLSLKLENKAKVSKREKPVVNLVPEAGMOCCLSDSGOVLLEEN 383
DB 434 GTYSCLVRNP-----VLQODA-----HGSVITITGO 458
QY 384 IKVLTWSTPVEBKSCDKHTHCPCPAPELLGSPSVLFPKPCKDTLMTSRPEVTCVV 443
DB 459 PMTFP---PEFEKSKDKHTHCPCPAPELLGSPSVLFPKPCKDTLMTSRPEVTCVV 515
QY 444 DVSHEDPEVKFNKYVDGVEVHNNAKTPREBQINSTYRVVSVLTVLHQDLNKEKEYCKYS 503
DB 516 DVSHEDPEVKFNKYVDGVEVHNNAKTPREBQINSTYRVVSVLTVLHQDLNKEKEYCKYS 575
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QY 504 NKALPAPIEKTISKAGQPREPOVYTLPPSRDELTKQNVSLTCLVKGFYPSDIAVWESN 563
DB 576 NKALPAPIEKTISKAGQPREPOVYTLPPSRDELTKQNVSLTCLVKGFYPSDIAVWESN 635
QY 564 GQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQGNVFSGVMEBALNHYTQSLSLIS 623
DB 636 GQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQGNVFSGVMEBALNHYTQSLSLIS 695
QY 624 PG 625
DB 696 PG 697

RESULT 52
US-10-077-023-9
/ Sequence 9, Application US/10077023
/ Publication No. US20030031675A1
/ GENERAL INFORMATION:
/ APPLICANT: MIKESELL, GLEN E.
/ APPLICANT: CHANG, HAN
/ APPLICANT: FINGER, JOSHUA N.
/ APPLICANT: YANG, GUOCHEN
/ APPLICANT: LU, PIN
/ APPLICANT: ZHOU, XIA-DI
/ APPLICANT: BEACH, ROBERT
/ TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
/ FILE REFERENCE: 3053-4071US3
/ CURRENT APPLICATION NUMBER: US/10/077,023
/ CURRENT FILING DATE: 2002-02-15
/ PRIOR APPLICATION NUMBER: 60/272,107
/ PRIOR FILING DATE: 2001-02-28
/ PRIOR APPLICATION NUMBER: 60/209,811
/ PRIOR FILING DATE: 2000-06-06
/ NUMBER OF SEQ ID NOS: 138
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 9
/ LENGTH: 698
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-10-077-023-9

Query Match          37.9%; Score 1293; DB 14; Length 698;
Best Local Similarity 44.7%; Pred. No. 2,4e-82;
Matches 296; Conservative 56; Mismatches 122; Indels 188; Gaps 19;

QY 32 KKGDTVELTCTASQ-KKSIQFHWKNSNQIKILGNGSFLTKGPKSLNDRADRSRLMDG 90
DB 156 RRGDTVTITCSSYQGYPEAEVFWQDGGVPLTGN-----VTTSQMANEGG 200
QY 91 NFPL-IINKLKIEDSDTYICEVEDQEEVQLVFGLTANSPTDLLOGSLTTLTLESPP-- 147
DB 201 LFDVHSILRVLGANGTISC-----LVRNVLQGDH-----SSVTITPQRSFPG 245
QY 148 -----GSSPSVQCR-SP-----RGKN-- 162
DB 246 AVEVQVEDPVVALVGTDTALRCSFSPERGFSIAQLNIWQLTDTKQLVHSFTEGRDQS 305
QY 163 -----IOGKTLVSQLELDSGTWTCTV-LQNKQKVEFKIDIVVLAFOKAS 208
DB 306 AVANRTALFPDLLAQGNASLRQVRVVADEGSFTCVSIRDFGSAAVSLQVAAPYSKPSM 365
QY 209 STVYKKE---GEVVEFSPLAFTVEKLTG--SGELMWAERASSSKSWITFDLKNKEVS 263
DB 366 TLEPNKDLARPGDV-----TITCSSYRGYPEAEVFWQD----- 398
QY 264 KAVTDPKIQMGKQLRLHLTLPOALPOYAGSGNLTLALBAKTGKLHQEVNLVVMRATOLQ 323
DB 399 -----GQGVPL-----TGNVTTSQMANEGGLF-DVHSVLRVVLGAN 433
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Qy 324 KNLTCVWGPTSPKLMLSLKLENKAKVSKREKPVWVLPNPDAGMOCCLSDSGOYLLESN 383
Db 434 GTVSCLYVNP-----VLQODA-----HGSLYTLTGQ 458
Qy 384 IKVLPWTSPVPEPKSCDKHTTCCPCAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVV 443
Db 459 PMTFP---PEEPKPSCDKTHTCPCAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVV 515
Qy 444 DVSHEDPEVKFNWYVDGVEVHNAAKTPREBOYNSTYRVVSVLTVLIHQDLNGKEKCKVS 503
Db 516 DVSHEDPEVKFNWYVDGVEVHNAAKTPREBOYNSTYRVVSVLTVLIHQDLNGKEKCKVS 575
Qy 504 NKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESN 563
Db 576 NKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESN 635
Qy 564 GQPENNYKTPPVLDSDGSFLYSKLTVDKSRMQQGNVSCVMHEALHNYTQKSLS 623
Db 636 GQPENNYKTPPVLDSDGSFLYSKLTVDKSRMQQGNVSCVMHEALHNYTQKSLS 695
Qy 624 PG 625
Db 696 PG 697

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RESULT 53
US-10-683-255-2
; Sequence 2, Application US/10683255
; Publication No. US20040063910A1
; GENERAL INFORMATION:
; APPLICANT: Kavanaugh, William M.
; APPLICANT: Ballinger, Marcus
; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
; FILE REFERENCE: PP01474.101
; CURRENT APPLICATION NUMBER: US/10/683,255
; CURRENT FILING DATE: 2003-10-10
; PRIOR APPLICATION NUMBER: 09/499,846
; PRIOR FILING DATE: 2000-02-07
; PRIOR APPLICATION NUMBER: 60/119,002
; PRIOR FILING DATE: 1999-02-08
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 622
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-683-255-2

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Query Match 37.8%; Score 1292; DB 12; Length 622;
Best Local Similarity 49.4%; Pred. No. 2.4e-82;
Matches 304; Conservative 47; Mismatches 117; Indels 148; Gaps 22;

Qy 109 CEVEQKEVQLLVFGLTANSQTHLLOGQSITLTLESPGSSPVQC--RSPKCK----- 161
Db 55 CRLRDVDSIMWLARGVQLAESNRTRITGEVEVQ-DSVPADSGLYACVTSSPGSDTTY 113
Qy 162 ---NIQGGKTLVSQLELDQSGT-----WTCTVLQNOKVEPKIDIVVL 202
Db 114 FSVAVSDALPSSSEDDDDDDSSSEKETDNTRKNVAWYT-----SEKKEKULHAV-- 166
Qy 203 AFQKASSIVYKKEGQVEFSPPLAFTVE-KLTGSGELMWQAERASSSKWITFDLKN-XE 260
Db 167 -----PAAKTVKFKCPSG-----TTPPTLRW-----LKNQKE 194
Qy 261 VSVKRVITDDPKLQMG---KLLPLHLTLPOALPOVAGSGNLTALAEATGKLHQBVL-V 315
Db 195 FK-----PDHRIQGYKRYAYATWSIINDSVF--SDGNATCIYENETGSIINHTYQLDV 245
Qy 316 VMRATQ---LQKNL-----TCEVWGPTSPKLMLSLKE----- 345
Db 246 VERSEHRIQLQGLPANKTVLALGSNVERMCKVYSDPQHIQMLKHIEVNSKIGPDNLFPY 305

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Qy 346 ---NKAQVSKREKPVWVLPN-----PEAGMOCCLSDS----- 375
Db 306 VQILKTAGVNTTDDKEVHLRNVSFEDAGEYCTLANSTGLSHSAMLTVLEALERRPA 365
Qy 376 ---GQVLLESNIKVLPTWS--TP--VEPKSCDKHTTCCPCAPPELLGGPSVFLFPPKDT 429
Db 366 VMTSPFLLESRGGLVPRGSGSPGLQEPKSCDKHTTCCPCAPPELLGGPSVFLFPPKDT 425
Qy 430 LMSRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAAKTPREBOYNSTYRVVSVLTVLI 489
Db 426 LMSRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAAKTPREBOYNSTYRVVSVLTVLI 485
Qy 490 QDWLNGKEYIKCKSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVK 549
Db 486 QDWLNGKEYIKCKSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVK 545
Qy 550 GFYPSDIAVEMESNGQPENNYKTPPVLDSDGSFLYSKLTVDKSRMQQGNVSCVMHE 609
Db 546 GFYPSDIAVEMESNGQPENNYKTPPVLDSDGSFLYSKLTVDKSRMQQGNVSCVMHE 605
Qy 610 ALHNYTQKSLSLSPG 625
Db 606 ALHNYTQKSLSLSPG 621

```

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RESULT 54
US-10-679-620-64
; Sequence 64, Application US/10679620
; Publication No. US20040110930A1
; GENERAL INFORMATION:
; APPLICANT: Large Scale Biology
; APPLICANT: Reini, Stephen J.
; APPLICANT: Edwards, Patricia C.
; TITLE OF INVENTION: MULTIMERIC PROTEIN ENGINEERING
; FILE REFERENCE: 34150-004A
; CURRENT APPLICATION NUMBER: US/10/679,620
; CURRENT FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/415,940
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 122
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 64
; LENGTH: 713
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: p9E1ochimericv2-1, see Example 15
US-10-679-620-64

```

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Query Match 37.8%; Score 1292; DB 16; Length 713;
Best Local Similarity 46.3%; Pred. No. 2.9e-82;
Matches 310; Conservative 51; Mismatches 145; Indels 164; Gaps 21;

Qy 33 KGDVVELTCTASQ--KKSIGFHWKNSQIKILNQGSFLTKGPKAKLNDRADRSRLNDQ 90
Db 130 KSGTASVYCCILNFPYREAVQWQVDNALQ-SGNSQBSVTEQDSK-----DSTYSL----- 179
Qy 91 NFPLIKNLKIEDSDTYICEVEDQKEVQLLVFGLTANSQTHLLOGQSITLTLESPGSS 150
Db 180 SSTLTLSKAYEKAKYVACEV-----TH--QGIS----- 206
Qy 151 PSVQCRSPRKNTIOGKTLVSQLELDQSGTWTCTVLQNOKVEPKIDIVLAFO----- 205
Db 207 -----SPVTKSFVRGE-CSLSKRTIDQSAF-----DTVDLGAELRRD 243
Qy 206 --KASSIVYKKEGQVEFSPPLAFTVEKLTGSGELMWQAERASSSKWITFDLKNQEVSV 263
Db 244 PPPTASDIGKRGGE-----VDLVESGGDLVPRGSLKLSGASGFTFSHYGMSW 292
Qy 264 KRVTDQPKLQ---MGKLLPLHLTLPOALPOVAGSGNLTALAEATGKLHQBVLVVMRA 319
Db 293 VRQTPDKLEWVATIGSR-GTYTHYPSV-----KGRFTISRNDKNAALYIQMNSLSASED 346

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OY 320 TOLONKJUC-----EWMGPTSPKLMISXLENN-----ANVSR----- 354
Db 347 TAM--YYCARSEFYNTYYYSAMUDWYGQASVTVSSASTSGSPVPLASSKSTSG 403
OY 355 -----EKPMV-----LNPEAGMOCULSDSGQVLTLSNIIKVLPTW$---- 391
Db 404 GTALGCLVKDYFPEPVVTVSNMGSALTSCHHTPRALVLOSSLGLYSL--SVVTVPSSSLGQ 462
OY 392 -----TPVEPKSCDKHTHCPRCPAPELLGGPSVFLFPPPKKDTLMI$RT 435
Db 463 TVICNNHHPKSTKYDKRVEPKSCDKYTHCTPCPCPAPELLGGPSVFLFPPPKDTLMI$RT 522
OY 436 PEVTCVVVDVSHEDPEVKFNMYVDGVEVNNAKTKKPREEQYNSTRYRVSVLTVDHOMLNG 495
Db 523 PEVTCVVVDVSHEDPEVKFNMYVDGVEVNNAKTKKPREEQYNSTRYRVSVLTVDHOMLNG 582
OY 496 KEYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFYPSD 555
Db 583 KEYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFYPSD 642
OY 556 IAVEMESNQGPENNNYKTTTPVLDSDGSFFLYSKLTVDKSRMGGANVFSCSVMEHALAHNY 615
Db 643 IAVEMESNQGPENNNYKTTTPVLDSDGSFFLYSKLTVDKSRMGGANVFSCSVMEHALAHNY 702
OY 616 TOKSLSLSPG 625
Db 703 TOKSLSLSPG 712

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RESULT 55
US-10-679-620-62
/ Sequence 62, Application US/10679620
/ Publication No. US20040110930A1
/ GENERAL INFORMATION:
/ APPLICANT: Large Scale Biology
/ APPLICANT: Reinl, Stephen J
/ APPLICANT: Edwards, Patricia C.
/ TITLE OF INVENTION: MULTIMERIC PROTEIN ENGINEERING
/ FILE REFERENCE: 34150-004A
/ CURRENT APPLICATION NUMBER: US/10/679,620
/ CURRENT FILING DATE: 2003-10-03
/ PRIOR APPLICATION NUMBER: 60/415,940
/ PRIOR FILING DATE: 2002-10-03
/ NUMBER OF SEQ ID NOS: 122
/ SOFTWARE: PatentIn version 3.2
/ SEQ ID NO 62
/ LENGTH: 715
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: p9E10chimericv1-1, see Example 15
US-10-679-620-62

Query Match          37.8%; Score 1292; DB 16; Length 715;
Best Local Similarity 48.1%; Pred. No. 2,9e-82;
Matches 293; Conservative 36; Mismatches 104; Indels 176; Gaps 15

OY      30 LAKKDDTYELICTAS-----QKSIQPHMKNSNOIKILNQGSFLTYGPKSL 76
DB      269 LVKPGGSLTSCAAGFTFSHYGMSWVRQTPDKRLW-----VATISRGTY-THYPSV 322
OY      77 NDRAASRSRLWQGNFPLIIKLIKIEDSDTYICEVEDQKEVQLVFGLTANSDTHLQ 136
DB      323 KGRFTISRDN-DKMLALYLMQNSLKSBDTAMTYC-----ARRSEFYIYGATYYTSSAMDYWG 376
OY      137 QSLTTLSESPSSPSVQCRSPRGKNIQGSKITLSVSOLELQDGTGTCTVLQNKQKVEFK 196
DB      377 QGASVTVASATKGRSPVFLPARSSKSTSG-TALGCL----- 413
OY      197 IDIVVLAPQKASITYYKKEGEVSEFSPLAFVYKLTGSGELMWQAEARSSSKSWITFDL 256
DB      414 -----VKDYFPEPPTVS-----MNSGALITSG----- 434

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[illegible]

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RESULT 56
US-10-416-011-2
; Sequence 2, Application US/10416011
; Publication No. US20040126363A1
; GENERAL INFORMATION:
; APPLICANT: Jensen, Michael
; APPLICANT: Forman, Stephen
; APPLICANT: Raubitschek, Andrew
; TITLE OF INVENTION: CD19-specific redirected immune cells
; FILE REFERENCE: 1954-338
; CURRENT APPLICATION NUMBER: US/10/416,011
; CURRENT FILING DATE: 2003-05-07
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 634
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: CD19R: zeta chimeric receptor
US-10-416-011-2

Query Match          37.8%; Score 1290; DB 16; Length 634;
Best Local Similarity 46.8%; Pred. No. 3,4e-82;
Matches 304; Conservative 39; Mismatches 121; Indels 166; Gaps 18

QY      10 LLLVQLAL--LP-----AATGKNKYVLGKKGPVLTCTASGKSQIHFH---K 54
      |||||  |||  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
DB      2  LLLVSLLLCLPHPAFLLIPDIQMTQTSSLASLGRVTISCRASODISKYLLMWYQOK 61
      |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||

QY      55 NSNOIKIINGOGSFITKG-PSKLNDRADSRSLMDQGNFPLIKLKTEDSDTYICEVED 113
      :||:|  |||  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
DB      62 PDGYVKLLIYTSRLHSGVPSRFSGSSGCT-----DYLTLISLBEEDATYTCQ--- 111
      |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||

QY      114 QKEEYQLLVFGELTANSSTHLIQGOSLVTLTSPGSSPSVQCR-SPRGKNIOG-GKTSIV 171
      |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
      |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||
DB      112 -----QGNTLPTPTF---GGGTKLEITGTSISGKPGSGEGSTK 146
      |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||

QY      172 SLESLDSDG-----TWTCVPLQNGKQKVEFIDIVLVAFOASSIVYKKEGEQYEF 221
      :||:|  |||  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
DB      147 GEVKLQESGPGPLVAPSGSLSTVCTCY-SGVSLPDYGVSWIRQPPRG----- 191
      |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||

QY      222 SFLPLATVEKLTGSGELMWMQAEARASSSKSWITFDLKNKEVSKRVTDQPKLQMGKKPLH 281
      |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||

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Db 192 -----LEMLGVIM-----GSEFTYNSALKSRLLTIK--DNSKQVFLKNSL 232
Qy 282 LTLPLQAL-----PQYAGSGNLTLLAEAKTGKLEQEVNLVWRATQLQKLTCEVWGPTS 335
Db 233 QTDPAIYCAKHHYYGGS-----YAMDYWG--- 258
Qy 336 PKLMLSLKLENKAYSKREKPVWVNLNBPAGMQLLSDSGVLLSNIKVLPTWSTPVE 395
Db 259 -----QGTSTVYSS-----VE 269
Qy 396 PKSCDKTHCPCPAPBELLGSPVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKEN 455
Db 270 PKSSKTHCPCPAPBELLGSPVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN 329
Qy 456 MYVDVEVHNATKREKREQYNSTYRVSVLTVLHODMNGKCKYKCNKALPAPIEIKTI 515
Db 330 MYVDVEVHNATKREKREQYNSTYRVSVLTVLHODMNGKCKYKCNKALPAPIEIKTI 389
Qy 516 SKAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFPSDIAVEMESNGQPENNYKTTTP 575
Db 390 SKAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFPSDIAVEMESNGQPENNYKTTTP 449
Qy 576 VLDSDGSFPLYSKLTVDKSRMQQGNVFSCSVNHEALHNHYTQKSLSLSPG 625
Db 450 VLDSDGSFPLYSKLTVDKSRMQQGNVFSCSVNHEALHNHYTQKSLSLSPG 499

RESULT 57
US-10-207-655-15

; Sequence 15, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden-Ledbetter, Martha S.
; TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
; FILE REFERENCE: 390069.401C1
; CURRENT APPLICATION NUMBER: US/10/207,655
; NUMBER OF SEQ ID NOS: 426
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 15
; LENGTH: 499
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: MOUSE-HUMAN HYBRID FUSION PROTEIN
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (1)..(265)
; OTHER INFORMATION: MOUSE ANTI-HUMAN CD20 SCFV; 2H7
; FEATURE:
; NAME/KEY: DOMAIN
; LOCATION: (266)..(499)
; OTHER INFORMATION: HUMAN IGG1 WILD TYPE HINGE, CH2, CH3 FC
US-10-207-655-15

Query Match 37.7%; Score 1288.5; DB 14; Length 499;
Best Local Similarity 48.9%; Pred. No. 3.2e-82;

Matches 299; Conservative 37; Mismatches 127; Indels 149; Gaps 18;

Qy 23 TQGNKVLVGLKKGDVLTCTASQKSIQFHWKNSNQIKLGNQSGFLTKGSPKLNDRADS 82
Db 27 SQSPAILIASPGEKVTMTCRASSSVS-YMHYQOKP---GSSPKPMIYAPSNLASGVPA 81
Qy 83 RRLMDQG-NPPLIKNLKIEDSDPTVICEVEDQKEVOLLVFGLTANSDDLHLOQGSITL 141
Db 82 RFGSGSGTYSYSLTISVEAEDATVYCO-----QMSFNPTP---GAGTKL 125
Qy 142 TLESPPSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLAQOKKVEFKIDIV 201
Db 126 ELKDGSGG-----GGSGGGGS---SQAYLQOSGA-----ELV- 156
Qy 202 LAFQKASSIVYKKEGQEVFSPFLAFTVEKLTG-----SGELMWAQERASSSKSWITFDLK 257

Db 157 -----REGASVKNWSC-----KASGTFTFSYNNHAWVKQTPRQGLEWIG----- 193
Qy 258 NKEVSVKRVYQDPRLLQMGKKLPLHLTLPLQALPOYAGSGNLTLLAEATGKLEQEVNLVVM 317
Db 194 -----ALPYGNDTFSYNOKFK-GK----- 211
Qy 318 RATQLQKNTLCEVWGPTSFKMLSLKLENK-----AKYSKREKPVWVNLNBPAGMQLL 373
Db 212 -----ATLTVDKSSSTAYVQLSLTSEDSAVYVCARVYVSNBYWFD-----VM----- 256
Qy 374 DSGVLLSNIKVLPTWSTPEPSCDKTHCPCPAPBELLGSPVFLPPKPKDTLMIS 433
Db 257 GTGFTTVSD-----QEPKSCDKTHCPCPAPBELLGSPVFLPPKPKDTLMIS 306
Qy 434 RTEPVTGVVVDVSHEDPEVKFNMYVDGVEVHNATKREKREQYNSTYRVSVLTVLHODWL 493
Db 307 RTEPVTGVVVDVSHEDPEVKFNMYVDGVEVHNATKREKREQYNSTYRVSVLTVLHODWL 366
Qy 494 NGKEYKCKVSNKALPAPIEIKTISKAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYP 553
Db 367 NGKEYKCKVSNKALPAPIEIKTISKAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYP 426
Qy 554 SDIAVEMESNGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRMQQGNVFSCSVNHEALHN 613
Db 427 SDIAVEMESNGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRMQQGNVFSCSVNHEALHN 486
Qy 614 HYTKSLSLSPG 625
Db 487 HYTKSLSLSPG 498

RESULT 58
US-10-207-655-148

; Sequence 148, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden-Ledbetter, Martha S.
; TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
; FILE REFERENCE: 390069.401C1
; CURRENT APPLICATION NUMBER: US/10/207,655
; NUMBER OF SEQ ID NOS: 426
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 148
; LENGTH: 499
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Mouse-Human hybrid fusion protein
US-10-207-655-148

Query Match 37.7%; Score 1288.5; DB 14; Length 499;
Best Local Similarity 48.9%; Pred. No. 3.2e-82;

Matches 299; Conservative 37; Mismatches 127; Indels 149; Gaps 18;

Qy 23 TQGNKVLVGLKKGDVLTCTASQKSIQFHWKNSNQIKLGNQSGFLTKGSPKLNDRADS 82
Db 27 SQSPAILIASPGEKVTMTCRASSSVS-YMHYQOKP---GSSPKPMIYAPSNLASGVPA 81
Qy 83 RRLMDQG-NPPLIKNLKIEDSDPTVICEVEDQKEVOLLVFGLTANSDDLHLOQGSITL 141
Db 82 RFGSGSGTYSYSLTISVEAEDATVYCO-----QMSFNPTP---GAGTKL 125
Qy 142 TLESPPSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLAQOKKVEFKIDIV 201
Db 126 ELKDGSGG-----GGSGGGGS---SQAYLQOSGA-----ELV- 156
Qy 202 LAFQKASSIVYKKEGQEVFSPFLAFTVEKLTG-----SGELMWAQERASSSKSWITFDLK 257
Db 157 -----RFGASVKNWSC-----KASGTFTFSYNNHAWVKQTPRQGLEWIG----- 193


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QY 258 NKEVSVKRYTOPBKLOMGKKLPMLHLTLPOALPOLYASSGNLTLLAEKGTGLHOEVNLVYM 317
Db 194 -----ALYPNGDTPSYNQKK-GR----- 211
QY 318 RATOLKONLTCEVWGPTSPKMLSLKLENKE-----AKVSRKEXPVWVLNBEAGMOCILS 373
Db 212 -----ATLTVDKSSSTAYMQLSSLTSEBSAVYFCARVYVYNSNYTFD-----VM----- 256
QY 374 DSGOVLLEBSNIKVLPTWSTPVEBKSCDKTHTCPCBAPELLGGPSVFLPEPKKDTLMTS 433
Db 257 GGTGTVTYVAD-----QEBKSCDKHTHCTPCBAPELLGGPSVFLPEPKKDTLMTS 306
QY 434 RRPETVTCVVVDVSHEDPEVKFNNYVGVGVYHNAKTRPEEQYNSTRYVSVLTVLHODWL 493
Db 307 RRPETVTCVVVDVSHEDPEVKFNNYVGVGVYHNAKTRPEEQYNSTRYVSVLTVLHODWL 366
QY 494 NGKEYKCKVSNKALPAPIEKTTISKAGQPREPOVYTLPSRDELSTKNQVSLTCLVVGFP 553
Db 367 NGKEYKCKVSNKALPAPIEKTTISKAGQPREPOVYTLPSRDELSTKNQVSLTCLVVGFP 426
QY 554 SDIAVEMESNGQRPENNYKTTTPVLVDSGDSFFLYLSKLTVDKSRMQQGNVFSCSYMHAEALHN 613
Db 427 SDIAVEMESNGQRPENNYKTTTPVLVDSGDSFFLYLSKLTVDKSRMQQGNVFSCSYMHAEALHN 486
QY 614 HTYOKSLSLSPG 625
Db 487 HTYOKSLSLSPG 498

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[illegible]

QY	202	IAPQASSIVYKKKEBEOUEFSPPLAFUYBEKLG----	SGELTMWOABRASSSSKSMTTFDJK	257
Dd	157	-----RPASVVMSC-----	KASGYFTSYNMHWVKOTPRQGLEWIG----	193
QY	258	NKEVSVKREVTOPPKLOMGKCLPYLHTLPRLPQVAGSGNLTALAEKTKGLHQEVALVYM		317
Dd	194	-----AIYPONGTYSNQKRK-GK-----		211
QY	318	RATOLQKULCEVWGPTSPBKMLSLKENKE---	AKYSKREKPVWLNPBEAMOCILS	373
Dd	212	-----ATLTVDKSSSTAYMOLSSLTSBEDSAVYFCARVVYYNSNYUFP----	VW-----	256
QY	374	DSGVLLESNIKVLPBTWSYVEPEKSCDKHNTCPPCPAPELGGPSVFLEPPPKOTLMIS		433
Dd	257	GTTGTIVYSD-----	QEPKSCDKHTTHTRPCCPAPELLGGPSVFLEPPPKOTLMIS	306
QY	434	RTPEVTCVAVDVSHEDPEVKFMVYDGEVHNAAKTPREEOYNSTYRVVSylvTLVHQDWI		493
Dd	307	RTPEVTCVAVDVSHEDPEVKFMVYDGEVHNAAKTPREEOYNSTYRVVSylvTLVHQDWI		366
QY	494	NGEKVKCVSNKAALAPLEKTSKAKQPREEOYVTLPRSRELTLNOVSLTCLVNGCFP		553
Dd	367	NGEKVKCVSNKAALAPLEKTSKAKQPREEOYVTLPRSRELTLNOVSLTCLVNGCFP		426
QY	554	S DIAEWESNCGPRENNYKTPPEVLVLDSDGSFFLYSKLTVDKSRMOOGNVSCSYMHEALNH		613
Dd	427	SDIAEWESNCGPRENNYKTPPEVLVLDSDGSFFLYSKLTVDKSRMOOGNVSCSYMHEALNH		486
QY	614	HYTOKSLSLSPG 625		
Dd	487	HYTOKSLSLSPG 498		

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RESULT 60
US-10-207-655-266
; Sequence 266, Application US/10207655
; Publication No. US20030118592a1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden-Ledbetter, Martha S.
; TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
; FILE REFERENCE: 390069.401C1
; CURRENT APPLICATION NUMBER: US/10/207,655
; CURRENT FILING DATE: 2002-07-25
; NUMBER OF SEQ ID NOS: 426
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 266
; LENGTH: 552
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion polypeptide
US-10-207-655-266

Query Match      37.7%; Score 1288.5; DB 14; Length 552;
Best Local Similarity 46.4%; Pred. No. 3.6e-82;
Matches 299; Conservative 41; Mismatches 122; Indels 183; Gaps 17.

1  MNRGVPRFHLHLVLQALLPATOGKNKVLGKGDPTVELTCTASOKSIQFHW---KNSN 57
      |||      |||
19  MSRGVD-----IVL-----TQSPATLSVTPDGRVLSGRASGISIDYLHWYQGSKE 65
      :|:      :|:
58  QIKILGNQGSFLTTG-PSKLNDRADSRRLMDQGNFPIIKLNKIEISDTYICVEYDKE 116
      :||:      :||:
66  SPRLLIKYASHSIGIPERFSGSGS-----SDFTLSINSVEDVGIYYCQ----- 112
      :||:      :||:
117 EVQLLVFGLTANSDTHLLQGQSLTLTLEPPGSSPSVQCRSPRGKNTQGGKTLVSOLEL 176
      |||:      |||:
113 -----HGHSFWTF---GGGTKEIKRGGGSGGGGSGGGGSGQIQQL 150
      :||:      :||:
177 QDSGWTCITVLQNGKVEFKIDIVLAFQKASSIVYKKEGEQVFEFSF---LAFT----- 228
      |||      |||

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Db 151 VQSGP-----ELKKPGETVRISCKASGVAFTTGMQ 181
Qy 229 -VEKLTGSGELWMAERASSSKSWITFDLKNKEVSVKVTQDPKLOMGKPLPLHLTPQA 287
Db 182 WQGEHPGKGLK-----IGWINTPLMSAKIC-----RRQO----- 211
Qy 288 LPQVAGSGLTLALEAKTGKHOEVNLVVMRATQLOKNLTCBWMGPTSPKMLSLKLENK 347
Db 212 -----GRFAFSLETSANTAYLQIS-----NLKDE-- 235
Qy 348 EAKVSRKRPVAVNLPEAGMOCLLSDSGQVLESNIKVLPTWS-----TPVPSKCD 400
Db 226 -----DATTYFCVRSNGKNY-----DLVYFAWGGQTLVTWSDLEPKSSD 275
Qy 401 KHTTCCPAPAPELLGSPVFLFPKPKDPLMISRTPEVTCVVVDVSHEDPEVKFMWYDG 460
Db 276 KHTTSPAPAPELLGSSVFLFPKPKDPLMISRTPEVTCVVVDVSHEDPEVKFMWYDG 335
Qy 461 VEVNNAKTRPREQYNSTRVAVSLTVLHODMLNGKEYCKVSNKALPAPIEKTISKAKG 520
Db 336 VEVNNAKTRPREQYNSTRVAVSLTVLHODMLNGKEYCKVSNKALPAPIEKTISKAKG 395
Qy 521 QPREQYVTLTPRSDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTPPVLDSD 580
Db 396 QPREQYVTLTPRSDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTPPVLDSD 455
Qy 581 GSFFLYSLKLTVDKSRWQGNVFCSVMEBALHNHYTQKSLSLSPG 625
Db 456 GSFFLYSLKLTVDKSRWQGNVFCSVMEBALHNHYTQKSLSLSPG 500

RESULT 61
US-10-334-235-38
; Sequence 38, Application US/10334235
; Publication No. US20040131591A1
; GENERAL INFORMATION:
; APPLICANT: Oxford Biomedica (UK) Ltd.
; APPLICANT: Kingsman, Alan
; APPLICANT: Bebbington, Christopher
; APPLICANT: Carroll, Miles
; APPLICANT: Ellard, Fiona
; APPLICANT: Kingsman, Susan
; APPLICANT: Myers, Kevin
; APPLICANT: Lamikandra, Abigail
; TITLE OF INVENTION: VECTOR SYSTEM
; FILE REFERENCE: 53268200920
; CURRENT APPLICATION NUMBER: US/10/334,235
; PRIOR FILING DATE: 2002-12-30
; PRIOR APPLICATION NUMBER: US 10/060,585
; PRIOR FILING DATE: 2002-01-29
; PRIOR APPLICATION NUMBER: PCT/GB00/04317
; PRIOR FILING DATE: 2000-11-13
; PRIOR APPLICATION NUMBER: US 09/445,375
; PRIOR FILING DATE: 1998-06-04
; NUMBER OF SEQ ID NOS: 40
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 38
; LENGTH: 600
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: peptide of 574Sabl
US-10-334-235-38

Query Match 37.7%; Score 1287; DB 16; Length 600;
Best Local Similarity 48.9%; Pred. No. 5, 2e-82;
Matches 31; Conservative 53; Mismatches 158; Indels 114; Gaps 20;

Qy 30 LGKKGDTVELTCTAS--QKSIQFHKNSNQIKIG-----NQGSLTKGSPSKLNDRA-- 80
Db 33 LVKPSASVKSISCKAGSYFTGYVHMVAVQSHKSLSEWIGRIINPNNGVTLNOKRFDKAIL 92
Qy 81 ---DSRSLMDQGNFPLIINKIKIEDSDTYICEVEDQKEEVQLAVFGLTANSSTHLLQ-- 135

Db 93 TVDKSSTTAY-----NELRSLTSEDSAVVYC-----ARSTMINYWDY 131
Qy 136 -GOSLTLTLPSPSSPSSVOCRSPRGKNIQOGKTLVSQ-----LELDPSGTCVTLQ 188
Db 132 WQVTSVTVSSGGGSGG-----GGTGGGSSIVWTVPTFLVLSAGDRAVTTCK-- 181
Qy 189 NQKVEFRKIDIVLAFQKASSIV--YKKEGEQVEF-----SPLAFTVEKLTGSGELMW 240
Db 182 -----ASQSVSNDVAVWQKQGSPTLLISYSSRYAGVPRFISG----- 223
Qy 241 QAEASSSKSWITFDLKNKEVSVKRVTPD-----PKLOMGKPLPLHLTL--POLLPQAG 293
Db 224 -----YGTDFFTTSTLQAEIDLAVYFCQDDYNSPPTFGGRTLEIKRSTKGPVFP-LAP 278
Qy 294 SGNLTALAEAKTGKHOEVNLVVMRATQLOKNLTCBWMGPTSPKMLSLKLENKAVSK 353
Db 279 SSKSTSGTALAGCLVADQVPEPEPTVSNWNGALTSGV--HTFPVAVLSSGLISLSVTV 336
Qy 354 REKEFWVLNPEAGM-----WQCLSDSGQVLESNIKVLPTWSTPEVPSKCDKHTCCPCP 409
Db 337 -----PSSLGQTGYICNVNHK-----PSNTKV-----DKVEPKSCDKHTCCPCP 378
Qy 410 APELLGSPVFLFPKPKDPLMISRTPEVTCVVVDVSHEDPEVKFMWYDGVEVHNAKTK 469
Db 379 APELLGSPVFLFPKPKDPLMISRTPEVTCVVVDVSHEDPEVKFMWYDGVEVHNAKTK 438
Qy 470 PREQYNSTRVAVSLTVLHODMLNGKEYCKVSNKALPAPIEKTISKAKQPREPOVYT 529
Db 439 PREQYNSTRVAVSLTVLHODMLNGKEYCKVSNKALPAPIEKTISKAKQPREPOVYT 498
Qy 530 LPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTPPVLDSDGSFFLYSL 589
Db 499 LPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTPPVLDSDGSFFLYSL 558
Qy 590 TVDKSRWQGNVFCSVMEBALHNHYTQKSLSLSPG 625
Db 559 TVDKSRWQGNVFCSVMEBALHNHYTQKSLSLSPG 594

RESULT 62
US-10-435-299-7
; Sequence 7, Application US/10435299
; Publication No. US20040052783A1
; GENERAL INFORMATION:
; APPLICANT: Welner, George
; APPLICANT: Gingrich, Roger
; APPLICANT: Link, Brian
; APPLICANT: Tso, J. Yun
; TITLE OF INVENTION: HUMANIZED ANTIBODIES AGAINST CD3
; FILE REFERENCE: 05882-0176-CNUS04
; CURRENT APPLICATION NUMBER: US/10/435,299
; PRIOR FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 09/618,380
; PRIOR FILING DATE: 2000-07-18
; PRIOR APPLICATION NUMBER: US 08/397,411
; PRIOR FILING DATE: 1995-03-01
; PRIOR APPLICATION NUMBER: US 07/859,583
; PRIOR FILING DATE: 1992-03-27
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 446
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Complete heavy chain of Humanized 1D10 Ab
US-10-435-299-7

Query Match 37.7%; Score 1286.5; DB 12; Length 446;
Best Local Similarity 48.4%; Pred. No. 3, 8e-82;
Matches 292; Conservative 33; Mismatches 103; Indels 175; Gaps 14;

```
QY 30 LGKKGDTVELTCTAQSQKSIQF--HWKNSNQIKILGNQGSFLTQKPSKLNDRADSRSL- 86
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 11 LVKPSFTLSLTCTVSGFSLTNVGVHWVROS PGKGLMEIVKMSGSGSTENNAFISRLTIS 70
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 87 --WDQGNFPLIINKLIKIEDSDTYICEVEDQKEVQLLVGLTANSDTHLQ--GQSLTLT 142
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 71 KQTSKNQVSLKLNLSLTADTAIVYC-----ARNDRYAMDVWGQGTLYT 113
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 143 LESPPGSSPVQCRSPRGKNIQGGKTLISVQLELDSDGTWCTVLTQNKVFEKIDIVL 202
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 114 VSSASTKQPSVFPPLAPSSKSTSGG--TALAGCL----- 144
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 203 AFQKASSIVYKKEGQEVFSFPLAFTVEKLTGSGELMQABRASSSKSWITFDLKNKEVS 262
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 145 -----VKDYFPEPVTVS-----MNSGALTSG----- 165
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 263 VKRVTQDPKIQMGKLPHLTLPLQALPQYAGSGNLTLEAKTGKJHGVNLVWMRATOL 322
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 166 -----VH--TFPAVL--QSSGLYSLSSVTVVPSSSLGTQTYI----- 198
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 323 QKNLTCEVWGPSPKLMLSLKLENKEAKVSKREKPYVWLNPEAGMQLLSDSGQVLLS 382
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 199 -----CNV-----NHRP-----S 206
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 383 NIKVLPTWSTPVEPKSCDKHTHCPCPAPBELLGSPVFLPPKPKDTLMISRTPEVTCV 442
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 207 NTKV-----DKVKEPKSCDKHTHCPCPAPBELLGSPVFLPPKPKDTLMISRTPEVTCV 262
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 443 VDVSHEDEPEVKFNWYVDGVEVHNAKTKPREBOYNSTYRVSVLTVLHODWLNKEKKCV 502
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 263 VVVSHEDEPEVKFNWYVDGVEVHNAKTKPREBOYNSTYRVSVLTVLHODWLNKEKKCV 322
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 503 SNKALPAPIEKTISKAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGYFSDIAVEMES 562
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 323 SNKALPAPIEKTISKAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGYFSDIAVEMES 382
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 563 NGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRWQGNVFGSVNHEALAHNYTQKSL 622
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 383 NGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRWQGNVFGSVNHEALAHNYTQKSL 442
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 623 SPG 625
      |||
Db 443 SPG 445
```

```
RESULT 63
US-10-418-836-38
; Sequence 38, Application US/10418836
; Publication No. US20040018573A1
; GENERAL INFORMATION:
; APPLICANT: Power, Scott D.
; APPLICANT: Wang, Huang
; APPLICANT: Ward, Michael
; TITLE OF INVENTION: Production of Functional Antibodies in
; FILE REFERENCE: GC741-2
; CURRENT APPLICATION NUMBER: US/10/418, 836
; CURRENT FILING DATE: 2003-04-17
; PRIOR APPLICATION NUMBER: US 60/373, 889
; PRIOR FILING DATE: 2002-04-18
; PRIOR APPLICATION NUMBER: US 60/411, 540
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: US 60/452, 134
; PRIOR FILING DATE: 2003-03-04
; PRIOR APPLICATION NUMBER: US 60/411, 537
; PRIOR FILING DATE: 2002-09-18
; NUMBER OF SEQ ID NOS: 40
; SOFTWARE: FaastSeq for Windows Version 4.0
; SEQ ID NO 38
; LENGTH: 972
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
```

```
; OTHER INFORMATION: fusion protein
US-10-418-836-38
Query Match 37.7%; Score 1286.5; DB 15; Length 972;
Best Local Similarity 48.4%; Pred. No. 1.1e-81;
Matches 292; Conservative 33; Mismatches 103; Indels 175; Gaps 14;

QY 30 LGKKGDTVELTCTAQSQKSIQF--HWKNSNQIKILGNQGSFLTQKPSKLNDRADSRSL- 86
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 537 LVKPSFTLSLTCTVSGFSLTNVGVHWVROS PGKGLMEIVKMSGSGSTENNAFISRLTIS 596
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 87 --WDQGNFPLIINKLIKIEDSDTYICEVEDQKEVQLLVGLTANSDTHLQ--GQSLTLT 142
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 597 KQTSKNQVSLKLNLSLTADTAIVYC-----ARNDRYAMDVWGQGTLYT 639
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 143 LESPPGSSPVQCRSPRGKNIQGGKTLISVQLELDSDGTWCTVLTQNKVFEKIDIVL 202
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 640 VSSASTKQPSVFPPLAPSSKSTSGG--TALAGCL----- 670
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 203 AFQKASSIVYKKEGQEVFSFPLAFTVEKLTGSGELMQABRASSSKSWITFDLKNKEVS 262
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 671 -----VKDYFPEPVTVS-----MNSGALTSG----- 691
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 263 VKRVTQDPKIQMGKLPHLTLPLQALPQYAGSGNLTLEAKTGKJHGVNLVWMRATOL 322
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 692 -----VH--TFPAVL--QSSGLYSLSSVTVVPSSSLGTQTYI----- 724
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 323 QKNLTCEVWGPSPKLMLSLKLENKEAKVSKREKPYVWLNPEAGMQLLSDSGQVLLS 382
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 725 -----CNV-----NHRP-----S 732
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 383 NIKVLPTWSTPVEPKSCDKHTHCPCPAPBELLGSPVFLPPKPKDTLMISRTPEVTCV 442
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 733 NTKV-----DKVKEPKSCDKHTHCPCPAPBELLGSPVFLPPKPKDTLMISRTPEVTCV 788
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 443 VDVSHEDEPEVKFNWYVDGVEVHNAKTKPREBOYNSTYRVSVLTVLHODWLNKEKKCV 502
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 789 VDVSHEDEPEVKFNWYVDGVEVHNAKTKPREBOYNSTYRVSVLTVLHODWLNKEKKCV 848
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 503 SNKALPAPIEKTISKAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGYFSDIAVEMES 562
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 849 SNKALPAPIEKTISKAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGYFSDIAVEMES 908
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 563 NGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRWQGNVFGSVNHEALAHNYTQKSL 622
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 909 NGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRWQGNVFGSVNHEALAHNYTQKSL 968
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 623 SPG 625
      |||
Db 969 SPG 971
```

```
RESULT 64
US-10-418-836-39
; Sequence 39, Application US/10418836
; Publication No. US20040018573A1
; GENERAL INFORMATION:
; APPLICANT: Power, Scott D.
; APPLICANT: Wang, Huang
; APPLICANT: Ward, Michael
; TITLE OF INVENTION: Production of Functional Antibodies in
; FILE REFERENCE: GC741-2
; CURRENT APPLICATION NUMBER: US/10/418, 836
; CURRENT FILING DATE: 2003-04-17
; PRIOR APPLICATION NUMBER: US 60/373, 889
; PRIOR FILING DATE: 2002-04-18
; PRIOR APPLICATION NUMBER: US 60/411, 540
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: US 60/452, 134
; PRIOR FILING DATE: 2003-03-04
; PRIOR APPLICATION NUMBER: US 60/411, 537
; PRIOR FILING DATE: 2002-09-18
```

NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 39
LENGTH: 975
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion protein
US-10-418-836-39

Query Match 37.7%; Score 1286.5; DB 15; Length 975;
Best Local Similarity 48.4%; Pred. No. 1.1e-81;
Matches 292; Conservative 33; Mismatches 103; Indels 175; Gaps 14;

QY 30 LGKKDDYELCTAQAQKSIQF--HWKSNQKILGNQSGFLTKGPKSLNDRADSRSL- 86
DB 540 LKPBETSLTCTTSGFSLTNGVMWROSPKGLMIGVWKGSGSTYNNAFISRLTIS 599
QY 87 --WDGNEPPLIINKLIEDSDTYICEVEDQKEVQLVFGLTANSDTHLQ--GQSLTLT 142
DB 600 KDTSKNQVSLKLNLSLTADTAVYC-----ARRDRYAMDYWGQGLVT 642
QY 143 LBSPPGSSPSVQCSPPRGKNIQGGKTLVSQLELSDSGTGTCTYLNQKVEFKIDIVL 202
DB 643 VSSASTKGPVFPPLAPSSKSTSG--TAALGCL----- 673
QY 203 AFQKASSIVYKKEGQVEFSPPLAFTVEKLTGSGELMQABRASSSKSMITFDLKNKVS 262
DB 674 -----VDYFPEPYTVS-----MNSGALTSG----- 694
QY 263 VKRVTDPEKLOMGKLLPHLTLPQALPOYAGSGNLTLEAKTGKHOEVNLVVMRATOL 322
DB 695 -----VH-FEPAYL-QSSGLYSLSSVTVPSLSLGTQYI----- 727
QY 333 QKNTCEWGPSPKMLSLKLENKAVSKREKVVWVLANPEAGMQLLSDSGVLLS 382
DB 728 ----CNV-----NHRK-----S 735
QY 383 NIKVLPTWSTPYEPKCDKTHTCPPCAPPELLGGSVFLPPPKDOLMISRTPEVTCV 442
DB 736 NTKV---DKVVEPSCDKTHTCPPCAPPELLGGSVFLPPPKDOLMISRTPEVTCV 791
QY 443 VDVSHEDEVEKKNVVDGEVHNNAKTKPREQYNSTYRVSVLTJVLHQMNGEKYKCV 502
DB 792 VDVSHEDEVEKKNVVDGEVHNNAKTKPREQYNSTYRVSVLTJVLHQMNGEKYKCV 851
QY 503 SNKALPAIEKTISSAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMES 562
DB 852 SNKALPAIEKTISSAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMES 911
QY 563 NGOPENNYKTPPVLDSDGSFFLYSKLTIVDKSRMQGVFSCSVHHEALHNYTQKSL 622
DB 912 NGOPENNYKTPPVLDSDGSFFLYSKLTIVDKSRMQGVFSCSVHHEALHNYTQKSL 971
QY 623 SPG 625
DB 972 SPG 974

RESULT 65
US-09-773-877A-18
Sequence 18, Application US/09773877A
Publication No. US2003001797A1
GENERAL INFORMATION:
APPLICANT: Xia, Yu-Ping et al.
TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES
FILE REFERENCE: REG 710B
CURRENT APPLICATION NUMBER: US/09/773,877A
CURRENT FILING DATE: 2001-01-31
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn version 3.0
SEQ ID NO 18
LENGTH: 462

TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Flt1(2-3)-Fc (Muc3)
US-09-773-877A-18

Query Match 37.7%; Score 1286; DB 12; Length 462;
Best Local Similarity 55.4%; Pred. No. 4.3e-82;
Matches 279; Conservative 37; Mismatches 84; Indels 104; Gaps 16;

QY 178 DSGTWTCTVYQ-----NOKVEFKIDIVVAFQKASSIVYKKEGQVEFSPPLAF 227
DB 6 DTGVLICALISCLLTGSSSGGRPFVEM-----YSEIPEIIMHTEGR--ELVTCRV 55
QY 228 TVEELT-----GSGELMQABRASSSKSMITFDLKNKVSVKRVTDPEKLO 273
DB 56 TSPNITTLTKKFPDLTILPGKRIW-----DSRKGFIISNATYKIGL----- 99
QY 274 MGKDLPHLTLPQALPOYAGSGNLTLEAKTGKLT-HQEVNLV-----MRAIOLQKN- 325
DB 100 -----LTCEATV-----NGHL-----YKTNVLTFRQNTIIVQISTPRPVKLLRGH 141
QY 326 ---LTCEWGPSPKMLSLKL---ENKEAKVSKR-----EKPVAVLN 362
DB 142 TVVLTNCTATTPLNTRVQMTWSYPDEKKNKASVRRRIDQSNHANIFYSVLTIDK--MON 198
QY 363 PEAGMQLLSDSGQVLLBSNIRY-LPTWSTPYEPKSCDKTHTCPPCAPPELLGGSPVFL 421
DB 199 KDKGLYTCRV--SGPSKSVNTSVHIYDKAGPGEPPSCDKTHTCPPCAPPELLGGSPVFL 257
QY 422 FPPPKDOLMISRTPEVTCVVDVSHEDPEVKKNVVDGEVHNNAKTKPREQYNSTYRV 481
DB 258 FPPPKDOLMISRTPEVTCVVDVSHEDPEVKKNVVDGEVHNNAKTKPREQYNSTYRV 317
QY 482 VSVTLTHQMLNGEKYKCVSNKALPAIEKTISSAKGQPREPOVYTLPPSRDELTKNQ 541
DB 318 VSVTLTHQMLNGEKYKCVSNKALPAIEKTISSAKGQPREPOVYTLPPSRDELTKNQ 377
QY 542 VSLTCLVKGFYPSDIAVEMESNGOPENNYKTPPVLDSDGSFFLYSKLTIVDKSRMQGV 601
DB 378 VSLTCLVKGFYPSDIAVEMESNGOPENNYKTPPVLDSDGSFFLYSKLTIVDKSRMQGV 437
QY 602 FSCSVHHEALHNYTQKSLSPG 625
DB 438 FSCSVHHEALHNYTQKSLSPG 461

RESULT 66
US-10-282-162-52
Sequence 52, Application US/10282162
Publication No. US20030143697A1
GENERAL INFORMATION:
APPLICANT: REGENERON PHARMACEUTICALS, INC.
TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
FILE REFERENCE: REG 203-B-US
CURRENT APPLICATION NUMBER: US/10/282,162
CURRENT FILING DATE: 2002-10-28
PRIOR APPLICATION NUMBER: 09/787,835
PRIOR FILING DATE: 1999-09-22
PRIOR APPLICATION NUMBER: PCT/US99/22045
PRIOR FILING DATE: 1999-09-22
NUMBER OF SEQ ID NOS: 56
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 52
LENGTH: 915
TYPE: PRT
ORGANISM: Homo sapiens
US-10-282-162-52
Query Match 37.7%; Score 1286; DB 14; Length 915;
Best Local Similarity 45.8%; Pred. No. 1.1e-81;
Matches 298; Conservative 51; Mismatches 129; Indels 172; Gaps 17;

Oy	33	KGDVETLCr-----ASOKSIOGHM-KNSNOIKIIGNOSFLLTKPSTLNRADSR	84
Db	380	EGEVALRCQVPRYMLTASVPRINTLTMKNDUSARTPq-----	:BEET 4222
Oy	85	SLMDQGNPLIINKLKIEDSDYICEVED-----OKEEVOLVFLGLTANSDTHL---	LOGQ 137
Db	423	RMWQDQALMLPLALQ-EDSGTVVCTTRNASYCDKMSIELARF---EUTDAFLFFISIPQ	478
Oy	138	SLTIT---LESPPGS-----SPSVQCRSPRGKRIQCGKTLVSQLEQ	177
Db	479	ILTSTSGVLVCPDLSEFTKDKTVKIOWKSLDLIDKXNEKFLSRSTTHLIVHDVALE	538
Oy	178	DSGTMSTV-----LONKQVFPKIDIVLAFOKASSIVYKSGGEYEF	22
Db	539	DAGYRCLVLFPAHEGGOYINTREIELRIKKKEEITPVISLTKITSLSLR-----	591
Oy	222	SFLPALTVEKLTSGB-----LWQARASSSSKSWITDCLKNEVSVKRYTQDPKLOMGK	276
Db	592	---LTIPCKVFLGNGPFLTLMWMTANDTHIESAY-----PGRVTEGPRQEXE	638
Oy	277	KLPLMLTLPLALPOYAGSGNLTALAEAKGK-LHDEVALVYMRATQLOKMLTCEWGPFS	335
Db	639	NNENYIEVP-----LIFPVRREDLHMDPKCVHNTLSFO-----	6737
Oy	336	PKLMLSLKENKEAKVSKREKPYWVLNPEAGMOCILSDSGVLLLESNIKVLPMTSTPVE	395
Db	674	-----TLRTTVKXAS-----S	684
Oy	396	PKSCDKTHTCPCPAPBELLGSPVLFPPPKYQDTLMSIKTPEVTCVVVDVSHEDPEYKN	455
Db	685	TFSQDKTHTCPCPAPBELLGSPVLPFPKPKYQDTLMSIKTPEVTCVVVDVSHEDPEYKN	744
Oy	456	WYVDGVEVNAAKTKPREEOYNSTRVAVSVLTVLHDQMLNGKRYKCVSNKALPAPIKTI	519
Db	745	WYVDGVEVNAAKTKPREEOYNSTRVAVSVLTVLHDQMLNGKRYKCVSNKALPAPIKTI	804
Oy	516	SKAKGQREPOVYTLPPSRDELTKQNVSLTCLVKGFPYSIDAVENESNGQENNYKTTTP	575
Db	805	SKAKGQREPOVYTLPPSRDELTKQNVSLTCLVKGFPYSIDAVENESNGQENNYKTTTP	864
Oy	576	VLDSDGSFLYKSLTVDKSMQOGNVPSCSVNHEALHNHYTQKSLSLSPG	625
Db	865	VLDSDGSFLYKSLTVDKSMQOGNVPSCSVNHEALHNHYTQKSLSLSPG	914

```

RESULT 67
US-10-404-724-23
: Sequence 23, Application US/10404724
: Publication No. US20030203447A1
: GENERAL INFORMATION:
: APPLICANT: Horwitz, Arnold H.
: TITLE OF INVENTION: Methods and Materials For Increasing Expression of Recombinant
: TITLE OF INVENTION: Polypeptides
: FILE REFERENCE: 13698US01
: CURRENT APPLICATION NUMBER: US/10/404,724
: CURRENT FILING DATE: 2003-03-31
: PRIOR APPLICATION NUMBER: US 60/368,530
: PRIOR FILING DATE: 2002-03-29
: NUMBER OF SEQ ID NOS: 79
: SOFTWARE: PatentIn version 3.2
: SEQ ID NO 23
: LENGTH: 465
: TYPE: PRT
: ORGANISM: Homo Sapiens
US-10-404-724-23

```

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Query Match      37.6%; Score 1284.5; DB 12; Length 465;
Best Local Similarity 47.4%; Pred. No. 5.5e-82;
Matches 302; Conservative 32; Mismatches 102; Indels 201; Gaps 17,

07      11 LVLQDALPATOQNKVVLG-----KKQDTVELTCTAAGKKSIOGHMKNSNOIKILNGNG 66
      |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||  |||||

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Db / LFLFLMAAQAQAQIQLVQSGPEYKPKPEBSKISCKGAS ---GYFTFKYGMNWKQAPGQG 63
QY 67 -----SEFLTGPSKTLNDRADRSRLMDQGNFP-----LIIKULKIEDSDTYI 108
Db 64 LKMMGMINTEPEPTDGD-----FKGRFTFLTDSTAYLISIRSREDTATY 114
QY 109 CEVEDQKEEYQLLVFELTANSDPTHLLOGOSLITLIESPPGSPAVQCRSPRGKNIQSGCT 168
Db 115 C-----ARFESAVD-----YKQCGTLVTIVSSASTGSPVFPPLAPSSKSTSG-T 157
QY 169 LSVSOLELDPGSGTGTCTVLOQNKVYFXIDIVLAFOKASSIVYKKEGEQYESFFPLAFT 228
Db 158 AALGCU-----VKQYFEPFVT 173
QY 229 VEKLTGSGELMWOAEKASSKSWITFDLKNKEVSKRVTODPKLQMGKULPHILTLFOAL 268
Db 174 VS-----WNKSGALTSG-----VH-TFPAVL 192
QY 289 POYAGSGNLTIALBAKTGKLGHEVNLVVMRATQLOKNLTCBVMGPTS PKLMLSKULENKE 348
Db 193 -QSSGLYSLSSVVTYVPSSLGTYTY-----CNV----- 220
QY 349 AKYSKKEKPEVWVLPNPEAGMOCCLSDSGVLLBSNIIKVLPTWSTPVEPKSCDHTHTPC 408
Db 221 -----NHRP-----SNTKY----DKRVEPKSCDKHTHTPC 247
QY 409 PABELLGGPSVFLFPFKPKOTLMISRTBEVTCVVVDVSHEDPEVKFMYWYDGVFNHAKT 468
Db 248 PABELLGGPSVFLFPFKPKOTLMISRTBEVTCVVVDVSHEDPEVKFMYWYDGVFNHAKT 307
QY 469 KPREEOYNSTRYRVSVLTVLHODMNLNGEKYCKVSNKALPAPIEKTSKAAGQPRERQY 528
Db 308 KPREEOYNSTRYRVSVLTVLHODMNLNGEKYCKVSNKALPAPIEKTSKAAGQPRERQY 367
QY 529 TLPPSDELTQKQVSLTCLVKGFYPSDIAVEMESNGOEYNNYKTTPEVLDSGSFFLYSK 588
Db 368 TLPPSDELTQKQVSLTCLVKGFYPSDIAVEMESNGOEYNNYKTTPEVLDSGSFFLYSK 427
QY 589 LTYDYSRMOQGNVFCSVNHEALHNHYTQKSLSLSPG 625
Db 428 LTYDYSRMOQGNVFCSVNHEALHNHYTQKSLSLSPG 464

```

RESULT 68
 US-10-656-769-32
 ; Sequence 32, Application US/10656769
 ; Publication No. US2004009712A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Varnum, Brian
 ; APPLICANT: Wiltse, Alison
 ; APPLICANT: Vezina, Chris
 ; APPLICANT: Mong, Lu Min
 ; APPLICANT: Qian, Xueming
 ; TITLE OF INVENTION: Therapeutic Human Anti-IL-1R Monoclonal Antibody
 ; FILE REFERENCE: 01,1554
 ; CURRENT APPLICATION NUMBER: US/10/656,769
 ; CURRENT FILING DATE: 2003-09-05
 ; NUMBER OF SEQ ID NOS: 79
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 32
 ; LENGTH: 467
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-656-769-32

```

Qy 16 LALLPAATG-----NKAIVLGGKGDIVELTCTASQKKSIOFH-----KNSN 57
Db 7 LALLLAATGCAEAVQIMQSGAEVKKKPEESLICKKS-GYSFSPHHIAAWROMPGKLE 65
      Query Match 37.6%; Score 1284; DB 16; Length 467;
      Best Local Similarity 46.8%; Pred. No. 6e-82;
      Matches 298; Conservative 36; Mismatches 101; Indels 200; Gaps 18

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Qy 58 QIKILGNOSGFLTKGPS---KLNDRADRSRL---WDOGNFPLIINKLIKIEDSPDYICE 110
Db 66 WMGITHPASDTRVSPSPGQVITISADNSNATYIQW-----SSLKASDTAMFYCA 116
Qy 111 VEDQKEVQLVFGITANSPTHLLLOGSILTLTLESPPGSSPSVQCRSPRGKNIQGGKTL 170
Db 117 ---RQRELDYDPDY-----WGGTTLVTVSSASTKGPSVFPPLAPSSKSTSGG-TAA 161
Qy 171 VSQLELDQSGTWTCTVLQNOQKVEFKIDIVLAFQKASSIYVKKEGEQVEFSPLAFTV 230
Db 162 LGCL-----VKDYFPEPYTVS 177
Qy 231 KLTSGLMWMQARASSSKSWITFDLKNKEVSVKRVTDPKLQMGKLLPLHLTLFQALPQ 290
Db 178 ---WMSGALTSG-----VH-TFPAVL-Q 195
Qy 291 YAGSGNLTALAEAKTKGKHQEVNLVVMRATQIQNLTCVWGPTSPKMLSLKLENKAK 350
Db 196 SSGLSYLSVTVVPSSSLGTQYI-----CNV----- 222
Qy 351 VSKREKRPVWLVNPEAGMMQCLSDSGQVLESNIKVLPTWSTPVEPKSCDKTHTCPCPA 410
Db 223 ---NHRP-----SNTKV-----DKKVEPKSCDKTHTCPCPA 251
Qy 411 PELLGSPVFLPPPKKDTLMISRPEVTCVVDVSHEDPEVKFNMYVDGVEVHNAKTKP 470
Db 252 PELLGSPVFLPPPKKDTLMISRPEVTCVVDVSHEDPEVKFNMYVDGVEVHNAKTKP 311
Qy 471 REEQNSTYRVVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKQPREPQVYT 530
Db 312 REEQNSTYRVVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKQPREPQVYT 371
Qy 531 PPSRDELTKNOVSLTCLVGFYPSDIAVEMESNGOPENNYKTPPVLDSDGSFFLYSKL 590
Db 372 PPSRDELTKNOVSLTCLVGFYPSDIAVEMESNGOPENNYKTPPVLDSDGSFFLYSKL 431
Qy 591 VDKSRMQOGNVFSCVMHEALHNHYTQKSLSPG 625
Db 432 VDKSRMQOGNVFSCVMHEALHNHYTQKSLSPG 466

RESULT 69
US-09-747-669-3
; Sequence 3, Application US/09747669
; Patent No. US20020122807A1
; GENERAL INFORMATION:
; APPLICANT: Dan, Michael D.
; APPLICANT: Saleh, Mansoor
; TITLE OF INVENTION: ANTIGEN BINDING FRAGMENTS, DESIGNATED
; TITLE OF INVENTION: 4B5 THAT SPECIFICALLY DETECT CANCER CELLS, NUCLEOTIDES
; TITLE OF INVENTION: ENCODING THE FRAGMENTS, AND USE THEREOF FOR THE PROPHYLAXIS
; TITLE OF INVENTION: AND DETECTION OF CANCERS
; FILE REFERENCE: 316082001001
; CURRENT APPLICATION NUMBER: US/09/747,669
; CURRENT FILING DATE: 2002-04-08
; PRIOR APPLICATION NUMBER: US 09/111,286
; PRIOR FILING DATE: 1998-07-07
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 476
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-09-747-669-3

Query Match 37.6%; Score 1284; DB 9; Length 476;
Best Local Similarity 46.7%; Pred. No. 6,1e-82;
Matches 297; Conservative 35; Mismatches 110; Indels 194; Gaps 16;
Qy 16 LALPLAATQGNKV-----LGGKGDVELTCTASQKSIQFH----- 52

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Qy 16 LALPLAATQGNKV-----LGGKGDVELTCTASQKSIQFH----- 52

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Db 8 LFLVAAATARSQVQLVQSGAEVYKPGASVYSCAKAGYFTFSFDLMMVRQAPQGLEMM 67
Qy 53 -WKNQSNQIKILGNOSGFLTKGPSKLNDRADRSRLWDOGNFPLIINKLIKIEDSPDYICEV 111
Db 68 GMMNPNSGK-----TGYAQKFGQRTVMTRTSTIRTAI-MELSGLRSEDTVAIVTCAR 117
Qy 112 EDQKEVQLV--VFGLTANSPTHLLLOGSILTLTLESPPGSSPSVQCRSPRGKNIQGGKTL 169
Db 118 NADVENMAAIYHYGMD-----VMGQTTVTVSSASTKGPSVFPPLAPSSKSTSGG-TA 169
Qy 170 VSQLELDQSGTWTCTVLQNOQKVEFKIDIVLAFQKASSIYVKKEGEQVEFSPLAFTV 229
Db 170 ALGCL-----VDYFPEPYTV 185
Qy 230 EKLTSGLMWMQARASSSKSWITFDLKNKEVSVKRVTDPKLQMGKLLPLHLTLFQALPQ 289
Db 186 S-----WMSGALTSG-----VH-TFPAVL- 203
Qy 290 QYAGSGNLTALAEAKTKGKHQEVNLVVMRATQIQNLTCVWGPTSPKMLSLKLENKAK 349
Db 204 QSSGLSYLSVTVVPSSSLGTQYI-----CNV----- 231
Qy 350 VSKREKRPVWLVNPEAGMMQCLSDSGQVLESNIKVLPTWSTPVEPKSCDKTHTCPCP 409
Db 232 ---NHRP-----SNTKV-----DKKVEPKSCDKTHTCPCP 259
Qy 410 APPELLGSPVFLPPPKKDTLMISRPEVTCVVDVSHEDPEVKFNMYVDGVEVHNAKTK 469
Db 260 APPELLGSPVFLPPPKKDTLMISRPEVTCVVDVSHEDPEVKFNMYVDGVEVHNAKTK 319
Qy 470 PREEQNSTYRVVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKQPREPQVYT 529
Db 320 PREEQNSTYRVVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKQPREPQVYT 379
Qy 530 LPPSRDELTKNOVSLTCLVGFYPSDIAVEMESNGOPENNYKTPPVLDSDGSFFLYSKL 589
Db 380 LPPSRDELTKNOVSLTCLVGFYPSDIAVEMESNGOPENNYKTPPVLDSDGSFFLYSKL 439
Qy 590 TVDKSRMQOGNVFSCVMHEALHNHYTQKSLSPG 625
Db 440 TVDKSRMQOGNVFSCVMHEALHNHYTQKSLSPG 475

RESULT 70
US-10-290-703-3
; Sequence 3, Application US/10290703
; Publication No. US20030118593A1
; GENERAL INFORMATION:
; APPLICANT: Dan, Michael D.
; APPLICANT: Saleh, Mansoor
; TITLE OF INVENTION: ANTIGEN BINDING FRAGMENTS, DESIGNATED
; TITLE OF INVENTION: 4B5 THAT SPECIFICALLY DETECT CANCER CELLS, NUCLEOTIDES
; TITLE OF INVENTION: ENCODING THE FRAGMENTS, AND USE THEREOF FOR THE PROPHYLAXIS
; TITLE OF INVENTION: AND DETECTION OF CANCERS
; FILE REFERENCE: 316082001002
; CURRENT APPLICATION NUMBER: US/10/290,703
; CURRENT FILING DATE: 2002-11-08
; PRIOR APPLICATION NUMBER: US 09/747,669
; PRIOR FILING DATE: 2000-12-21
; PRIOR APPLICATION NUMBER: US 09/111,286
; PRIOR FILING DATE: 1998-07-07
; PRIOR APPLICATION NUMBER: US 60/051,945
; PRIOR FILING DATE: 1997-07-08
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 476
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-290-703-3

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US-10-290-703-3

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```
Query Match      37.6%; Score 1284; DB 14; Length 476;
Best Local Similarity 46.7%; Pred. No. 6,1e-82;
Matches 297; Conservative 35; Mismatches 110; Indels 194; Gaps 16;

QY 16 LALLPAAATGCKNV-----LGGKGDVVELTCTASOKKSIQPH-----52
DB 8 LFLVMAATARSQVQLVQSGAEVKKRPAASVKASCKASGYTFSTFDLNMVVRQAPGQGLEWM 67
QY 53 -WGNSTQIKLGNQSFRTKGPSTKLNDRASRLMDQGNFPLIINKIKEDSDTYICEV 111
DB 68 GMMNPVSGK-----TGYAQKFOGRVTMTNTSIRIAY-MELGSLSEDTAVVFCAR 117
QY 112 EDOKEEVOLV--VFGLTANSDTLHLOQSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTL 169
DB 118 MDNVEMAAIYHYGMD-----VMGCGTTVVSASTGSPFPLAPSSASTSGG-TA 169
QY 170 SVSQLELDSDGWTCTVLQNKQKVEFKIDIVLAFQKASIVYKKEGEVSEFPLAFTV 229
DB 170 ALQCL-----VKDYFPPPTV 185
QY 230 EKLTSGELMWOABASSKSWITFDLKKEVSVKRVTDPRKQMGKLPRLHITLPLQALP 289
DB 186 S-----WNSGALTSG-----VH-TFPAVL- 203
QY 290 QVAGSGLTLALEAKTGKTLHQEVNLVYMATOLQKMLTCEVMGPTSPKMLSLKLENKA 349
DB 204 QSSGLYSLSVTVPSSSLGTQTYI-----CNV-----231
QY 350 KVKREKPVWVLNPEAGMOCCLSDSGVLLSENIKVLPTWSTPVEPKSCDKTHTCPCP 409
DB 232 ---NHKP-----SNTKV---DKVFPKSCDKTHTCPCP 259
QY 410 APELLGGPSVLEPPPKKDTLMTSRPEVTCVVVDVSHEDPEVKFMWYDGVENHAKTK 469
DB 260 APELLGGPSVLEPPPKKDTLMTSRPEVTCVVVDVSHEDPEVKFMWYDGVENHAKTK 319
QY 470 PREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPQVY 529
DB 320 PREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPQVY 379
QY 530 LPPSRDELTKNOVSLTCLVKGYFSPSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYSKL 589
DB 380 LPPSRDELTKNOVSLTCLVKGYFSPSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYSKL 439
QY 590 TVDKSRMQGQNVFSCSVMEHALHNHYTKSLSPG 625
DB 440 TVDKSRMQGQNVFSCSVMEHALHNHYTKSLSPG 475

RESULT 71
US-10-378-567-2
; Sequence 2, Application US/10378567
; Publication No. US20040006208A1
; GENERAL INFORMATION:
; APPLICANT: KARPUSAS, MICHAEL
; APPLICANT: HSU, YEN-MING
; APPLICANT: TAYLOR, FREDERICK R.
; APPLICANT: ZHENG, ZHONGLI
; TITLE OF INVENTION: CO-CRYSTAL STRUCTURE OF MONOCLONAL ANTIBODY 5C8 AND
; FILE REFERENCE: A096CON1
; CURRENT APPLICATION NUMBER: US/10/378,567
; PRIOR FILING DATE: 2003-02-28
; PRIOR APPLICATION NUMBER: PCT/US01/27352
; PRIOR FILING DATE: 2001-08-31
; PRIOR APPLICATION NUMBER: 60/276,452
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: 60/229,933
; PRIOR FILING DATE: 2000-09-01
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 448
```

```
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: humanized 5c8 heavy chain amino acid
US-10-378-567-2

Query Match      37.6%; Score 1283.5; DB 15; Length 448;
Best Local Similarity 47.9%; Pred. No. 6,1e-82;
Matches 293; Conservative 39; Mismatches 97; Indels 183; Gaps 17;

QY 25 GNRVVLGKKGDVVELTCTASQK--KSIQPHMKNSTQIKLGNQ--SFL-----TKGPKSL 76
DB 8 GAEV--KRGASVSKSCASGYIFTSYMYW-----VQAPQGLEWMEIGETIPNSGDITNF 60
QY 77 NDRASRLSW--DQGNFPLIINKIKEDSDTYICEVDQKEEVOLVFGTLANSDTLH 133
DB 61 NEKFKSKATLTVDKASASTAYMELSLRSEDITAVVYCTRSDDGNDMD-----106
QY 134 LOGOSLTLTLESPPSSPSVQCRSPRGKNIQGGKTLVSQLELDSDGWTCTVLQNKKV 193
DB 107 SWGQGLTVVSASTGSPFPLAPSSASTSGG-TAALGCL-----146
QY 194 EFKIDIVLAFQKASIVYKKEGEVSEFPLAFTVEKLTGSGELMWOABASSKSWIT 253
DB 147 -----VKDYFPPPTVS-----WNSGALTSG-----167
QY 254 FDLKKEVSVKRVTDPRKQMGKLPRLHITLPLQALPYAGSGLTLALEAKTGKTLHQEVN 313
DB 168 -----VH-TFPAVL-QSSGLYSLSVTVPSSSLGTQTYI-----199
QY 314 LVYMATOLQKMLTCEVMGPTSPKMLSLKLENKAISKKEKPVWVLNPEAGMOCCLIS 373
DB 200 I-----CNV-----NHKP-----207
QY 374 DSGQVLLSENIKVLPTWSTPVEPKSCDKTHTCPCPAPELTGGPSVFLPPPKKDTLMTS 433
DB 208 -----SNTKV---DKVFPKSCDKTHTCPCPAPELTGGPSVFLPPPKKDTLMTS 255
QY 434 RTEVTCVVVDVSHEDPEVKFMWYDGVENHAKTKPREEQYNSTYRVVSVLTVLHQDWL 493
DB 256 RTEVTCVVVDVSHEDPEVKFMWYDGVENHAKTKPREEQYNSTYRVVSVLTVLHQDWL 315
QY 494 NGKEYKCKVSNKALPAPIEKTIISKAKGQPREPQVYTLTPSRDELTKNOVSLTCLVKGYF 553
DB 316 NGKEYKCKVSNKALPAPIEKTIISKAKGQPREPQVYTLTPSRDELTKNOVSLTCLVKGYF 375
QY 554 SDIAVEMESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRMQGQNVFSCSVMEHALHN 613
DB 376 SDIAVEMESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRMQGQNVFSCSVMEHALHN 435
QY 614 HYTQKSLSPG 625
DB 436 HYTQKSLSPG 447

RESULT 72
US-10-207-655-396
; Sequence 396, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden-Ledbetter, Martha S.
; TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
; FILE REFERENCE: 390069.401C1
; CURRENT APPLICATION NUMBER: US/10/207,655
; CURRENT FILING DATE: 2002-07-25
; NUMBER OF SEQ ID NOS: 426
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 396
; LENGTH: 500
; TYPE: PRT
; ORGANISM: Artificial Sequence
```



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: CURRENT APPLICATION NUMBER: US/10/207,655
:
: CURRENT FILING DATE: 2002-07-25
:
: NUMBER OF SEQ ID NOS: 426
:
: SOFTWARE: PatentIn version 3.0
:
: SEQ ID NO 350
:
: LENGTH: 768
:
: TYPE: PRT
:
: ORGANISM: Artificial Sequence
:
: FEATURE:
:
: OTHER INFORMATION: fusion polypeptide
US-10-207-655-350

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Query	March	37.6%	Score 1282	DB 14	Length 768
Best Local Similarity	47.0%	Pred. No. 1,6e-81			
Matches 293	Conservative	38	Mismatches 122	Indels 170	Gaps 15
Qy	23	TQGNKVVYGGKKQDVELTCTTASQKKSIQFHW---	KNSNQIKLGNQSGFLTKG-PSKUND	78	
Db	295	TQSPATLSVTPQDRVSLSCRASQSISDYLIHWYQKSHSPRLLIKVAHSHISIGIPSRSG	354		
Qy	79	RADRSRLMDQGNPFLITIKNLKIDPSDYICEVEQKEQVOLLVGLTRANSHTLLQGS	138		
Db	355	SGSG-----SDFLTINSVEPELVGIYCO-----	HGHS 383		
Qy	139	LTLTLESPGSSPSVQCRSPRGKNIQSGKTLVSQLELQDSGTWCTVLONQKVEFKID	198		
Db	384	FPWF---GGGTKLKIRGGGGSGGGSGGGGQIOLVQSGP-----	422		
Qy	199	IVLVAFAQASSIVYKKEGEQVBFSP--LAFT-----	VEKLTSGSELMOAERASSK 249		
Db	423	-----ELKKPGETVRISSKASGYAFFTTTGMQVQEMPKGJGW-----	I 461		
Qy	250	SWITFDLKNKEVSVKRVTPQDPLQMGKLPHLTLPAQLPYAGSGNLTLLAEATKGKH	309		
Db	462	GNITPPLMSAKIC-----RLQ-----	GRAFSLETAMRAY 493		
Qy	310	QEVNLVVMRAQLOKQLTCEVWGPTSPKLMLSLKLENKEAKVSKREKPVVNLPEAGMQ	369		
Db	494	LOIS-----NLKDE-----	DTATYF 508		
Qy	370	CLLDSQGVLLSNIKVLPTWS-----	TPPEKSCQKTHCPRCPAPELLGSPVFLF 422		
Db	509	CVRSGNGY---DLAYFAVYMGQGLTVLVSDPEPSSDKHTSPSPAPELLGSSVFLF	564		
Qy	423	PKPKDITLMSIRTEPVTCVVVDVSHEDDEPKVFNMYVDGVEVHNAATKREEQYNSTRVY	482		
Db	565	PKPKDITLMSIRTEPVTCVVVDVSHEDDEPKVFNMYVDGVEVHNAATKREEQYNSTRVY	624		
Qy	483	SVLTVLHODMLNGKEXKCKVSNKALPAIEKTIISAKQOPREPOVYTLPPASDELTKNOV	542		
Db	625	SVLTVLHODMLNGKEXKCKVSNKALPAIEKTIISAKQOPREPOVYTLPPASDELTKNOV	684		
Qy	543	SLTCLVKGFPESDIAVWESNQOPENNKTTPPVLDSDGSFELYSKLTVDSKRMQGNVF	602		
Db	685	SLTCLVKGFPESDIAVWESNQOPENNKTTPPVLDSDGSFELYSKLTVDSKRMQGNVF	744		
Qy	603	SCSVWHEALAHNYTQKSLSLSPG 625			
Db	745	SCSVWHEALAHNYTQKSLSLSPG 767			

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RESULT 77 260A-4292
US-10-108-260A-4292
: Sequence 4292, Application US/10108260A
: Publication No. US20040005560A1
:
: GENERAL INFORMATION:
: APPLICANT: HELIX RESEARCH INSTITUTE
: TITLE OF INVENTION: No. US20040005560A1el full length cDNA
: FILE REFERENCE: H1-A0106
: CURRENT APPLICATION NUMBER: US/10/108,260A
: CURRENT FILING DATE: 2002-03-27
: NUMBER OF SEQ ID NOS: 5458
: SOFTWARE: PatentIn Ver. 2.1

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; SEQ ID NO 4292
; LENGTH: 470
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-108-260A-4292

```

Query Match	37.5%	Score 1281.5;	DB 15;	Length 470;
Best Local Similarity	48.0%;	Pred. No. 9.1e-82;		
Matches 299;	Conservative 39;	Mismatches 100;	Indels 185;	Gaps 18;

QY	15	QALLPATQGNKVLLGKKGGTVELTCTAS--OKKSIQFHNKN-----SNQIKIL	62
Db	20	QVQLVQSGTE----YKRGSSVAVKSCASGSGSSSYFTWVRQAPRGLEMGMSIIFIL	74
QY	63	GNQGSFLTKGSPKLNDRADSRRSIMDQGNFPLIIKNLKIEDSDTYICEVEDQKEVOLLV	122
Db	75	G-RPYAVKQFQDRVTLISADESSSI-----VYMDLRLTIEDTATYFCAI-----LLE	120
QY	123	FGLTANSTHLLLOQSLLTLESPPGSSPSVQCSPRKKNIOGCKTILSVSOLELDQSTW	182
Db	121	HEVRLRFQ-HWGQGLTVLVSSASTKG--PSVFPLAPSSKTSGG-TAALGCL-----	168
QY	183	TCTVLQNKVKEFKIDIVLAFQKASIVYKKEGEQVEFSPFLAFTVEKLTGSGELMMQA	242
Db	169	-----VADYFPEPYTVS-----NNS	183
QY	243	ERASSSKSWITFDLKNKEVSVKRVYTDPKLOMKKLPILHLTPQALPOLYAGSNITLALB	302
Db	184	GALTSIG-----VH-TFPAYL-QSSGLYSLSVVT	210
QY	303	AKTGKLGQENVLVYMRATQLOKNTCEVYGPPTSFKLMLSLKENKEAKVSRKREPVYVLN	362
Db	211	VPSSSLGTQTYI-----CNV-----NKKP-----	229
QY	363	PEAGMOCGLSDSGQVLLLESNIKYLPTWSTPEVPEKSCDKTHTCPPCAPELLGSPVELF	422
Db	230	-----SNTKV-----DKVPEPKSCDKTHTCPPCAPELLGSPVELF	266
QY	423	PPKKDITMISRTPEVTCVVVDVSHEDPEVKFNNYVYDGEVHNNAKTKRREQDYNSTRYVV	482
Db	267	PPKPRDITMISRTPEVTCVVVDVSHEDPEVKFNNYVYDGEVHNNAKTKRREQDYNSTRYVV	326
QY	483	SVLTGLVHODMVLNGEKYCKCKVNNKLLPARIKTIISKAGQREPEQVYTLPPSRDELTKQV	542
Db	327	SVLTGLVHODMVLNGEKYCKCKVNNKLLPARIKTIISKAGQREPEQVYTLPPSRDELTKQV	386
QY	543	SLTCLVKGFPYSDIAVWESNGQRENNYKTPRPVLDSGDSFFLYSKLTVDKSRMQGNVF	602
Db	387	SLTCLVKGFPYSDIAVWESNGQRENNYKTPRPVLDSGDSFFLYSKLTVDKSRMQGNVF	446
QY	603	SCSVNHEALHNHYTQKSLSLSPG	625
Db	447	SCSVNHEALHNHYTQKSLSLSPG	469

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RESULT 78
US-10-683-255-6
; Sequence 6, Application US/10683255
; Publication No. US20040063910A1
; GENERAL INFORMATION:
; APPLICANT: Kavanaugh, William M.
; APPLICANT: Ballinger, Marcus
; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
; TITLE OF INVENTION: RECEPTOR-IMMUNOGLOBULIN FUSION
; FILE REFERENCE: P01474.101
; CURRENT APPLICATION NUMBER: US/10/683,255
; CURRENT FILING DATE: 2003-10-10
; PRIOR APPLICATION NUMBER: 09/499,846
; PRIOR FILING DATE: 2000-02-07
; PRIOR APPLICATION NUMBER: 60/119,002
; PRIOR FILING DATE: 1999-02-08
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0

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; SEQ ID NO 6
; LENGTH: 497
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-683-255-6

Query Match
  37.5%; Score 1281.5; DB 12; Length 497;
  Best Local Similarity 68.1%; Pred. No. 9.8e-82;
  Matches 258; Conservative 22; Mismatches 53; Indels 46; Gaps 6;

QY 293 GSGNLTALAEAKTGLHQ--EVLNVMBATQLOKNL--TCEVWGPTSPKMLSLKLE-- 345
DB 118 GSINHTYQDVERSPHRPILOAGLPANKTVAGLSVNEFWCKYSDPOQHIOMLKHIEVN 177
QY 346 -----NKEAKYSKREKPVWVLN-----PEAGMOCCLSDS-----GQ 377
DB 178 GSKIGPDNLPHYQILITAGVNTTDKEMEVLHLRNVSFEDAGEYTCCLAGNSIGLSHHSAML 237
QY 378 VLLESNIKVLPTWSTPV-----EPKSCDXTHTCPCPAPPELLGSPVFLFPPKP 426
DB 238 TVLEALEERPAVMTSPLYLEGSGSPGLQEPKSCDXTHTCPCPAPPELLGSPVFLFPPKP 297
QY 427 KDTLMIISRTPEVTCVVDVSHEDPEVKFMWYVDGEVHNAAKTKPREEOYNSTYRVVSVLT 486
DB 298 KDTLMIISRTPEVTCVVDVSHEDPEVKFMWYVDGEVHNAAKTKPREEOYNSTYRVVSVLT 357
QY 487 VLHODMLNGKEYCKYCKSNKALPAPIKTIISKAKGQPREQVYTLTPPSRDELTKNOVSLTC 546
DB 358 VLHODMLNGKEYCKYCKSNKALPAPIKTIISKAKGQPREQVYTLTPPSRDELTKNOVSLTC 417
QY 547 LVKGFPSDIAVEMESNGOPENNYYKTTTPVLDSGDSFFLYSKLTVDKSRMOQGNVFSGSV 606
DB 418 LVKGFPSDIAVEMESNGOPENNYYKTTTPVLDSGDSFFLYSKLTVDKSRMOQGNVFSGSV 477
QY 607 MHEALHNHYTQKSLSLSPG 625
DB 478 MHEALHNHYTQKSLSLSPG 496

RESULT 79
US-10-683-255-4
; Sequence 4, Application US/10683255
; Publication No. US20040063910A1
; GENERAL INFORMATION:
; APPLICANT: Kavanaugh, William M.
; APPLICANT: Ballinger, Marcus
; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
; FILE REFERENCE: RECEPTOR-IMMUNOGLOBULIN FUSION
; CURRENT APPLICATION NUMBER: US/10/683,255
; CURRENT FILING DATE: 2003-10-10
; PRIOR APPLICATION NUMBER: 09/499,846
; PRIOR FILING DATE: 2000-02-07
; PRIOR APPLICATION NUMBER: 60/119,002
; PRIOR FILING DATE: 1999-02-08
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FaastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 525
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-683-255-4

Query Match
  37.5%; Score 1281.5; DB 12; Length 525;
  Best Local Similarity 68.1%; Pred. No. 1.1e-81;
  Matches 258; Conservative 22; Mismatches 53; Indels 46; Gaps 6;

QY 293 GSGNLTALAEAKTGLHQ--EVLNVMBATQLOKNL--TCEVWGPTSPKMLSLKLE-- 345
DB 146 GSINHTYQDVERSPHRPILOAGLPANKTVAGLSVNEFWCKYSDPOQHIOMLKHIEVN 205
QY 346 -----NKEAKYSKREKPVWVLN-----PEAGMOCCLSDS-----GQ 377
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DB 206 GSKIGPDNLPHYQILITAGVNTTDKEMEVLHLRNVSFEDAGEYTCCLAGNSIGLSHHSAML 265
QY 378 VLLESNIKVLPTWSTPV-----EPKSCDXTHTCPCPAPPELLGSPVFLFPPKP 426
DB 266 TVLEALEERPAVMTSPLYLEGSGSPGLQEPKSCDXTHTCPCPAPPELLGSPVFLFPPKP 325
QY 427 KDTLMIISRTPEVTCVVDVSHEDPEVKFMWYVDGEVHNAAKTKPREEOYNSTYRVVSVLT 486
DB 326 KDTLMIISRTPEVTCVVDVSHEDPEVKFMWYVDGEVHNAAKTKPREEOYNSTYRVVSVLT 385
QY 487 VLHODMLNGKEYCKYCKSNKALPAPIKTIISKAKGQPREQVYTLTPPSRDELTKNOVSLTC 546
DB 386 VLHODMLNGKEYCKYCKSNKALPAPIKTIISKAKGQPREQVYTLTPPSRDELTKNOVSLTC 445
QY 547 LVKGFPSDIAVEMESNGOPENNYYKTTTPVLDSGDSFFLYSKLTVDKSRMOQGNVFSGSV 606
DB 446 LVKGFPSDIAVEMESNGOPENNYYKTTTPVLDSGDSFFLYSKLTVDKSRMOQGNVFSGSV 505
QY 607 MHEALHNHYTQKSLSLSPG 625
DB 506 MHEALHNHYTQKSLSLSPG 524

RESULT 80
US-10-207-655-346
; Sequence 346, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden-Ledbetter, Martha S.
; TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
; FILE REFERENCE: 390069.401C1
; CURRENT APPLICATION NUMBER: US/10/207,655
; CURRENT FILING DATE: 2002-07-25
; NUMBER OF SEQ ID NOS: 426
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 346
; LENGTH: 543
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion polypeptide
US-10-207-655-346

Query Match
  37.5%; Score 1281; DB 14; Length 543;
  Best Local Similarity 46.9%; Pred. No. 1.2e-81;
  Matches 300; Conservative 43; Mismatches 116; Indels 180; Gaps 17;

QY 1 MNRGVPRFHLILVLTQALLPAPATQGNKVLGKKGDVTELTCTASQKKSIGFHMKNSTQIX 60
DB 19 MSRGVD-----IVL-----TQSPPTTASPGKRVITTCRASSSVSTWYQOKS--- 62
QY 61 ILGNQSFLLTKGPSKLNDRADSRRLMDQG--NPLIIRKLKIEDSDTYICEVEDQKEEVO 119
DB 63 --GASPKLMIYDTSLASGVNRFSGSGSGTSYSTLAINTMTEDEATATYYC----- 111
QY 120 ILVFGVLANSDTHLIQGSLTTLTSPSSPSVQCRPRKNIQCGKTLVSQLELQDS 179
DB 112 -----QWSTPLTF-----GSGTKLEIKRGGSGSGSGSGSGGVOLKXA 152
QY 180 G-----TWTCVVLONQKKVEFKIDIVLVAQKASSIYKKEGQVRESFPLAFTV 229
DB 153 GPGVLVPTQTLSTLCTV-----SGFS----- 173
QY 220 EKLTSGEILMQAERASSKSWITFDLKNKEYSVGRVTQDPYLQWGXKLPLHLTPPALP 289
DB 174 --LTSDGVYH-----INQRP-----GKGLGW-----MGII 196
QY 290 QYASGNLTALAEATGKLHDEVLNVMBATQLOKNL--TCEVWGPTSPKMLSLKLEKBA 349
DB 197 YYDGGTDVNSAIKSR-----LSISRDS-----KSOVFLKINSIQ- 231
QY 350 KYSKREKPVWVLNPEAGMOCCL--LSDSGVVLLESNIKVLPTWSTPVPEPKSCDXTHTCP 406
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Db      232 -----TDDTAMYYCARIHFDYWGQ-----GVMWTVSSDLEPKSSDKHTSP 272
Qy      407 PCPAPELLGSPVLPFPKPKDITLMIISRTPEVTCVAVDVSHEDPEKFNWYVDGVEVNA 466
Db      273 PSPAPELLGSSVFLFPKPKDITLMIISRTPEVTCVAVDVSHEDPEKFNWYVDGVEVNA 332
Qy      467 KTKPREOYNSTRYVSVLTVLHODMLNGKEYCKCVSNKALPAPIEKTISAKAGPREPQ 526
Db      333 KTKPREOYNSTRYVSVLTVLHODMLNGKEYCKCVSNKALPAPIEKTISAKAGPREPQ 392
Qy      527 VYTLPPSDELTKNVSLTCLVKGFPSPDIAMWESNGQPENNYKTPPVLDSDGSFPLY 586
Db      393 VYTLPPSDELTKNVSLTCLVKGFPSPDIAMWESNGQPENNYKTPPVLDSDGSFPLY 452
Qy      587 SKLTVDSKRMQOQNVFSCVMHEALHNNHYTOKSLSPG 625
Db      453 SKLTVDSKRMQOQNVFSCVMHEALHNNHYTOKSLSPG 491

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RESULT 81
US-10-320-231A-79
; Sequence 79, Application US/10320231A
; Publication No. US20030194405A1
; GENERAL INFORMATION:
; APPLICANT: Neben, Steven
; APPLICANT: Takeuchi, Toshihiko
; APPLICANT: Tomkinson, Adrian
; TITLE OF INVENTION: Antibody Inhibiting Stem Cell Factor Activity And Use For
; FILE REFERENCE: 7430*163
; CURRENT APPLICATION NUMBER: US/10/320,231A
; CURRENT FILING DATE: 2002-12-19
; PRIOR APPLICATION NUMBER: US 60/342,174
; PRIOR FILING DATE: 2001-12-17
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: Patent version 3.2
; SEQ ID NO 79
; LENGTH: 445
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: synthetic sequence
US-10-320-231A-79

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Query Match      37.4%; Score 1278.5; DB 14; Length 445;
Best Local Similarity 48.1%; Pred. No. 14e-81;
Matches 295; Conservative 35; Mismatches 90; Indels 193; Gaps 17;

Qy      30 LKKKGDVLELTCTAS-----QKKSIOFHMKNSNOIKILGNQGSFL---TKG 72
Db      8 LVQPGSRLRLSCAAGFTFFSYAMGVMVQAPGKLEWISA-----ISGSGSYYVADVSKG 63
Qy      73 PSKLNDRADRSRLSDQGNFPLIILNKLIEDSDTYICEVEDQKEVQLLVGLTANSTH 132
Db      64 RFTIS-RNNSKNTLYLQNN-----SLRAEDTAVVYVCARD-----FFAHFP-- 103
Qy      133 LLOGSLTLTLSPGSSPSVOCSPRGKNIGGKTLISVSOLELDSDGTWCTVVLQNK 192
Db      104 -VMGGTLYTVSSASTKGPSVFLPAPSSKSTSG- TAAIGCL----- 143
Qy      193 VEFKIDIVLAFQKASSIVYKKEGBOVEFSPPLAFVTEKLTGSGELMWQARRASSSKSMI 252
Db      144 -----VKDYFPEPVTVS-----WNSGALTSG----- 164
Qy      253 TFDLKNKEVSKRVYQDPKLOMGKPLHLTLPOALPOYASGNITLLEAKTGKLEHVLV 312
Db      165 -----VH-TFPAVL-QSSGLYSLSSVTVTPSSSLGTQTY-- 195
Qy      313 NLVVMRATQLOKNTLCEVWGFTSPKMLMLSLKENKAIVSKREKPVWVLNPEAGWMOCLL 372
Db      196 YI-----CNY-----NHRP----- 204

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Qy      373 SDSGOVLLSNIKVLPTWSTPVEBKSCDKTHTCPCPAPELLGSPVLPFPKPKDITLMI 432
Db      205 -----SNTKV-----DKVEPKSCDKTHTCPCPAPELLGSPVLPFPKPKDITLMI 251
Qy      433 SRTPEVTCVAVDVSHEDPEKFNWYVDGVEVNAKTKPREOYNSTRYVSVLTVLHODW 492
Db      252 SRTPEVTCVAVDVSHEDPEKFNWYVDGVEVNAKTKPREOYNSTRYVSVLTVLHODW 311
Qy      493 LNGKEYCKCVSNKALPAPIEKTISAKAGPREPOVYTLPSRDELTKNVSLTCLVKGFPY 552
Db      312 LNGKEYCKCVSNKALPAPIEKTISAKAGPREPOVYTLPSRDELTKNVSLTCLVKGFPY 371
Qy      553 PSDIAMEWESNGQPENNYKTPPVLDSDGSFPLYSKLTVDSKRMQOQNVFSCVMHEALH 612
Db      372 PSDIAMEWESNGQPENNYKTPPVLDSDGSFPLYSKLTVDSKRMQOQNVFSCVMHEALH 431
Qy      613 NHYTOKSLSPG 625
Db      432 NHYTOKSLSPG 444

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RESULT 82
US-10-138-727A-41
; Sequence 41, Application US/10138727A
; Publication No. US20030157054A1
; GENERAL INFORMATION:
; APPLICANT: Gillies, Stephen
; APPLICANT: Lo, Kin-Ming
; APPLICANT: Qian, Susan
; TITLE OF INVENTION: Recombinant Tumor Specific Antibody And Use Thereof
; FILE REFERENCE: LEX-019
; CURRENT APPLICATION NUMBER: US/10/138,727A
; CURRENT FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: US 60/288,564
; PRIOR FILING DATE: 2001-05-03
; NUMBER OF SEQ ID NOS: 42
; SOFTWARE: Patent version 3.0
; SEQ ID NO 41
; LENGTH: 579
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: heavy chain-IL2
US-10-138-727A-41

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Query Match      37.4%; Score 1278.5; DB 14; Length 579;
Best Local Similarity 47.3%; Pred. No. 2e-81;
Matches 299; Conservative 37; Mismatches 93; Indels 203; Gaps 18;

Qy      32 KKGDTVELTCTASQKKSIOF--HMKNSNOIKILGNQ--SFLTGPSPKLNDRADRSRLW 87
Db      13 KPGSTVATSCAAGYFTTNGMNVKQTPGKGLKMWGMINTYTGEFTYADD----- 63
Qy      88 DQGNFP-----LIIKNLKIEDSDTYICEVEDQKEVQLLVGLTANSTH 136
Db      64 FKGFAPASLETSTJSTAFLOINNLASEDTATYFC-----VREISKG-----DYWGQ 109
Qy      137 OSLLTLTLSPGSSPSVOCSPRGKNIGGKTLISVSOLELDSDGTWCTVVLQNKVFEK 196
Db      110 TSVTVSSASTKG--PSVFLPAPSSKSTSG- TAAIGCL----- 144
Qy      197 IDIVLAFQKASSIVYKKEGBOVEFSPPLAFVTEKLTGSGELMWQARRASSSKSMITFDL 256
Db      145 -----VKDYFPEPVTVS-----WNSGALTSG----- 165
Qy      257 KNKEVSKRVYQDPKLOMGKPLHLTLPOALPOYASGNITLLEAKTGKLEHVLV 316
Db      166 -----VH-TFPAVL-QSSGLYSLSSVTVTPSSSLGTQTY-- 198
Qy      317 MRATQLOKNTLCEVWGFTSPKMLMLSLKENKAIVSKREKPVWVLNPEAGWMOCLLSDSG 376
Db      199 -----CNY-----NHRP----- 205

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Qy 377 QVLBSNIVKLPMTWSTPVEPKSCDKTHTCTPCPAPELLGGPSVFLPPEPKDTLMISRP 436
Db 206 -----SNTKV-----DKRVEPKSCDKTHTCTPCPAPELLGGPSVFLPPEPKDTLMISRP 256
Qy 437 EYTCVAVDVSHEDPEVKFMVYDGVGVHNAKTPREEOYNSTYRVSVLTVLHODMLNKR 496
Db 257 EYTCVAVDVSHEDPEVKFMVYDGVGVHNAKTPREEOYNSTYRVSVLTVLHODMLNKR 316
Qy 497 EYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDI 556
Db 317 EYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDEMTNQVSLTCLVKGFYPSDI 376
Qy 557 AYWEBSNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRMQGNVSCSVMHEALHNYT 616
Db 377 AYWEBSNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRMQGNVSCSVMHEALHNYT 436
Qy 617 OKSLSPG-----IQDDETCHEAQ 636
Db 437 OKSLSPGAKAPTSSTKKTQLQLEHLLDLQ 468

RESULT 83
US-10-108-260A-4282
; Sequence 4282, Application US/10108260A
; Publication No. US20040005560A1
; GENERAL INFORMATION:
; APPLICANT: HELIX RESEARCH INSTITUTE
; TITLE OF INVENTION: No. US20040005560A1a1 full length cDNA
; FILE REFERENCE: H1-A0106
; CURRENT APPLICATION NUMBER: US/10/108,260A
; NUMBER OF SEQ ID NOS: 5458
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4282
; LENGTH: 474
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-108-260A-4282

Query Match 37.4%; Score 1278; DB 15; Length 474;
Best Local Similarity 51.9%; Pred. No. 1.6e-81;
Matches 289; Conservative 32; Mismatches 92; Indels 144; Gaps 15;

Qy 120 LTVFGITANSDFHLQ-GQSLFTLESPPSGSPSVOCRS----- 157
Db 10 LLAIVAGASQAOLLOSPEV-----RKGGASVYKSCASGDFTRDFLQWROAPGGQL 64
Qy 158 -----PRG-----KNIQGGKTL-----VSQLELDGSGTWCTVLQNKKV 193
Db 65 EWMGFIDPSGSGTLVQNFGQRTVMTREHSTTVVWELSLKSEDPATVFCGGSVN---- 120
Qy 194 EKKIDIVLAFQKASSIVYKKEGEQVEFPLAFYVEKLTGSG--ELMWQKERRASSGKS 250
Db 121 -----IVSTTSGDDPDLLWGGGTIVTVSSA 145
Qy 251 WITFDLKNKEVSKRVTDQPKLQMGKKLPLHLTLQALPOYAGSGNLTALAKTKGLHQ 310
Db 146 -----STGPEVFFPLAPSSKSTSGTALGCLVADYFPE-----PVTVMNNGALTS 192
Qy 311 EYNL--VVMRATQOLQNLTCCEVWGPTSPKMLSLKLENKAAVSKREKFWVLNPEAGWM 368
Db 193 GVHTFPVALQSSGLY-SLSSVTVPS-----SLGQTYICNVN--HKF----- 233
Qy 369 QCLLSDSGOVLLESNIKVLPTWSTPVEPKSCDKTHTCTPCPAPELLGGPSVFLPPEKPD 428
Db 234 -----SNTKV-----DKKVEPKSCDKTHTCTPCPAPELLGGPSVFLPPEKPD 276
Qy 429 TLMISTPEVTCVAVDVSHEDPEVKFMVYDGVGVHNAKTPREEOYNSTYRVSVLTVL 488
Db 277 TLMISTPEVTCVAVDVSHEDPEVKFMVYDGVGVHNAKTPREEOYNSTYRVSVLTVL 336
Qy 489 HODWLNGEKYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLV 548
Db 489 HODWLNGEKYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLV 548
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Db 337 HODWLNGEKYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLV 396
Qy 549 KGFYPSDIAVEBSNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRMQGNVSCSVMH 608
Db 397 KGFYPSDIAVEBSNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRMQGNVSCSVMH 456
Qy 609 EALHNHYTQKSLSPG 625
Db 457 EALHNHYTQKSLSPG 473

RESULT 84
US-10-107-991B-3
; Sequence 3, Application US/10107991B
; Publication No. US20040058445A1
; GENERAL INFORMATION:
; APPLICANT: LEDBETTER, JEFFREY
; APPLICANT: HAYDEN-LEDBETTER, MARTHA
; APPLICANT: HELSTROM, INGEGARD
; APPLICANT: HELSTROM, KARL ERIK
; TITLE OF INVENTION: ACTIVATION OF TUMOR-REACTIVE LYMPHOCYTES VIA ANTIBODIES
; FILE REFERENCE: 034474.0004
; CURRENT APPLICATION NUMBER: US/10/107,991B
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: 60/286,585
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PatentIn version 2.1
; SEQ ID NO 3
; LENGTH: 555
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Mouse-Human Fusion Protein
; NAME/KEY: SIGNAL
; LOCATION: (1)..(23)
; OTHER INFORMATION: L6 V kappa signal peptide
; FEATURE:
; NAME/KEY: DOMAIN
; LOCATION: (24)..(133)
; OTHER INFORMATION: G19-4 mouse anti-human CD3 light chain variable domain
; FEATURE:
; NAME/KEY: PEPTIDE
; LOCATION: (134)..(148)
; OTHER INFORMATION: (Gly4Ser)3 linker peptide
; FEATURE:
; NAME/KEY: DOMAIN
; LOCATION: (149)..(270)
; OTHER INFORMATION: G19-4 mouse anti-human VH domain
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (271)..(504)
; OTHER INFORMATION: human IgG1 Fc domain (hinge, CH2, CH3)
; FEATURE:
; NAME/KEY: TRANSMEM
; LOCATION: (505)..(555)
; OTHER INFORMATION: human CD80 transmembrane domain and cytoplasmic tail
US-10-107-991B-3

Query Match 37.4%; Score 1278; DB 12; Length 555;
Best Local Similarity 47.5%; Pred. No. 2e-81;
Matches 302; Conservative 46; Mismatches 126; Indels 162; Gaps 18;

Qy 1 MNRGVPFHLVLLVQLALPPATQGNKVVLDKGGPTVELTCTASQKSIQFHW--KSN 57
Db 19 MSRGVDIQ-----MTQTSSLSASLDGRTVTSRAQDITRNVTNYMQQKFDG 65
Qy 58 QIKILNGSGFLTKGPSKLNDRADSRSLWDQ--NPLIINKLIEDSDTYICEVEDQKE 116
Db 66 TVKLL-----IYVT--SRLLHSGVPSRFSGSGSGTDYSLTIANLPEDVATYFCQ----- 112
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QY 117 EVOLLVFEI1LTANSDPHLL2LGOSL3LTLESPGSSSV4CCSP5PRKKN6IQGKT7---LSVQ8 173
Db 113 -----QGN1TL2PWT3---GG4TK5LV6TK7RL8GGGGGGGGGGGGGG9STIDE10 151
QY 174 LELOD1SGTWTCTVLON2CKVEFKID3IVVLA4FOKASSI5YKKEGCE6OVERSP7PLA8TVEX9LT 233
Db 152 VQLQOOSG1-----ELV2---KPGAS3MC4KASG5---YSF6-TG7IVN8--- 183
QY 234 GSGEL1WQAE2RASSK3SWIT4FDL5KNKEV6SVK7RV8TOD9PKLQ10MGK11CL12PL13HL14TL15QAL16PO17YAG 293
Db 184 -----MLK1QSHG2KNLE3WIG4LIN5PKGL6LT---TYN7QK8F9----- 213
QY 294 SGN1TL2MLEAT3GK4LHO5VNL6WM7RA8TOLQ9KNL10CE11WGP12SP13PK14ML15SL16KLEN17EAK18YK19S 355
Db 214 -GKAT1LV2DKSS3STRAY4ME-----LST5TSB6----- 237
QY 354 REK1PVW2VLNP3EAG4WMO5CL6SS---DSG7VL8LES9NIK10VL11PT12WST13VE14PE15PC16SK17TC18PC19P 409
Db 238 -----DS1AY2YCAR3SG4YGD5SD6MY7FD8WGA9GT10VT11YS12DL13EP14SS15SK16HT17SP18SP 287
QY 410 APE1LLG2BS3VE4LP5PK6PD7TL8MS9RT10PE11VT12CV13VD14SH15DE16EV17K18FN19MY20VD21GE22VE23HN24AK25TK 469
Db 288 APE1LLG2SS3VE4LP5PK6PD7TL8MS9RT10PE11VT12CV13VD14SH15DE16EV17K18FN19MY20VD21GE22VE23HN24AK25TK 347
QY 470 PRE1BO2YN3STR4RV5SV6LT7VL8HD9ML10NG11KEY12K13CV14SN15KAL16PA17I18E19K20TS21KA22KQ23PRE24PO25YTT 529
Db 348 PRE1BO2YN3STR4RV5SV6LT7VL8HD9ML10NG11KEY12K13CV14SN15KAL16PA17I18E19K20TS21KA22KQ23PRE24PO25YTT 407
QY 530 LP1PS2RDEL3TK4NO5VL6TL7CV8KG9FP10SD11IA12VE13WES14NO15Q16PN17NY18K19TP20PV21LD22SG23FF24LY25SK26L 589
Db 408 LP1PS2RDEL3TK4NO5VL6TL7CV8KG9FP10SD11IA12VE13WES14NO15Q16PN17NY18K19TP20PV21LD22SG23FF24LY25SK26L 467
Db 468 TV1DKSR2WQ3QGN4V5FG6SV7HM8EAL9HN10HY11TQ12KS13LS14SPG 503

RESULT 85
US-10-232-838-17
; Sequence 17, Application US/10232838
; Publication No. US20030064053A1
; GENERAL INFORMATION:
; APPLICANT: Liu, Shengjiang
; APPLICANT: Martini, Jean-Francois
; APPLICANT: Liu, Dayou
; TITLE OF INVENTION: MULTIVALENT PROTEIN CONJUGATE WITH MULTIPLE LIGAND-BINDING DOMAINS
; TITLE OF INVENTION: RECEPTORS
; FILE REFERENCE: 26050-707
; CURRENT APPLICATION NUMBER: US/10/232, 838
; CURRENT FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: US 06/316, 718
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 17
; LENGTH: 934
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: MVP-B
; US-10-232-838-17

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Query Match	37.4%	Score 1378	DB 12	Length 934
Best Local Similarity	39.0%	Pred. No. 46-81		
Matches	328	Conservative	68	Mismatches 141, Indels 304, Gaps 31
QY	33	KGDVYELTCTASQ--KKSIGFWKSNQKIKLGNQGSFUTKPSKLNDRADSRRLMNG	90	
DB	149	RGHTLVNLCTATTPNTRVQMTWSY--PDKNKRAASVRRRI--DOS	190	
QY	91	N-----FPLIKNIKIEDSDPYICEVEDQKEVOLLVFGLTANSDFHL-----Q	135	
DB	191	NSHANIIFYSVLLIDQNKDKGLYCRVRASGSS-----FKSVNTSVHIIYDKAFITWK	243	

QY	136	QGSLLTLESPPGSSPSVQCSPRKNIQGG---	KTLSVSLQLELDSDGWTCTVLO	ONOK	131
Db	244	GAGLINSIPLVSDATSLTLC---	IASGRPHPEITIGR-----	DFEALNNQ	HOD 289
QY	192	KVEFKIDIVLAFQASSIVYKKEGEQVEFSPFLAFTVEKLTGS---	GELMWOA-----		242
Db	290	PLEVYQDV---TREAKKVVMBRE---	KASKINGAYRCBGRVREALIRIT		334
QY	243	---ERASSSSKSWITFDI---KNKEVSVKRV---TOD---	PKLOMGKLP		279
Db	335	MMKMQQASFLPATLITMTVDKGDVNNISFKKALIKEEDAVIYKNGSEFIHSVPREHVEDILE			394
QY	280	LHLTLPOLPQVAG-----SGNLTLA-----LEAK-----	TGKL		308
Db	395	VH--LPHQPODQAGVSARYIGGNLFTSAFTPLIVRCEAOQKMPRECNIHCTACMNNQVC			452
QY	309	HOENVLVVM-----RATOLO-----			323
Db	453	HEDTGECCICPGOFMKRTCEKACELHTFGRTCKERCSSGOBCKSSYVCLDPYGCSCATGW			512
QY	324	KNLTGE-----VMGP-----	TSPKLM		339
Db	513	KGLQGENACHPGFYGPDCKLRCSNNNGEMCDRFQGLCSPGWGLQCSEREGIPRMTPKIY			572
QY	340	-LSLKLFE-----NKEAKSKKEKPYW-----			359
Db	573	DLPDHIENVSGKFENDICKASGMPLPTNEBMTLVKBDGTVLHPKDFENHTHFSVALFTIHR			632
QY	360	VLPNPAQMOCCLSD--SGCVLLLESNI--KVLPT			391
Db	633	ILPPSGVWCVSVNIVAGMVEKPRNISVYKVLKPLNAPRVIDTGNHFAVINISSEPYFGD			692
QY	392	TPV-----BEKSCDKTHTCPCAPBLIGSPVFLFPKPKRDTIMISRTPEVTCVVD			444
Db	693	GPISKKLVDDEKSCDKTHTCPCAPABELIGSPVFLFPKPKRDTIMISRTPEVTCVVD			752
QY	445	VSHEDPEYKFMNYVNGVEVNAKKTPRREQVNSTRYVSVLVTLHODMYLNGXEYKCKVSN			504
Db	753	VSHEDPEYKFMNYVNGVEVNAKKTPRREQVNSTRYVSVLVTLHODMYLNGXEYKCKVSN			812
QY	505	KALPAPIEKTISKAKGQPREPOVYTLTPRSRDELTLNQVSLTCLVKGFYPSDIAVEMESNG			564
Db	813	KALPAPIEKTISKAKGQPREPOVYTLTPRSRDELTLNQVSLTCLVKGFYPSDIAVEMESNG			872
QY	565	QPENNYKTTTPVLDSDGSGFFLYSKLTVDSKRWQOGNVFSCSVMHREALNHNHTQKSLSLSP			624
Db	873	QPENNYKTTTPVLDSDGSGFFLYSKLTVDSKRWQOGNVFSCSVMHREALNHNHTQKSLSLSP			932
QY	625	G 625			
Db	933	G 933			

```

RESULT 86
US-10-150-475A-6
; Sequence 6, Application US/10150475A
; Publication NO. US20030103985A1
; GENERAL INFORMATION:
; APPLICANT: Adolf, G. et al.
; TITLE OF INVENTION: Cytotoxic CD4 Antibody Immunocjugates
; FILE REFERENCE: 1/1211
; CURRENT APPLICATION NUMBER: US/10/150,475A
; CURRENT FILING DATE: 2002-05-17
; PRIOR APPLICATION NUMBER: US 60/307,451
; PRIOR FILING DATE: 2001-07-24
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: Patentn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 444
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
/

```

OTHER INFORMATION: Description of Artificial Sequence: Humanised
OTHER INFORMATION: Murine Antibody B1W4 Heavy Chain SEQ ID NO: 6
US-10-150-475A-6

Query Match 37.4%; Score 1277.5; DB 14; Length 444;
Best Local Similarity 48.1%; Pred. No. 1.6e-81;
Matches 293; Conservative 35; Mismatches 92; Indels 189; Gaps 17;

```
30 LGKKGDTVELTCTAS--QKSIQFHW-----KNSNQIKILGNQGSFL-----TKGPSKL 76
11 LKPGGSLRLSCAAGFTSSSYDMSWVRQAPGKGLVETISSGSGSYTYIYLDISIGRFTI 70
77 NDRADSRSLMDQGFPLIILKLIKEDSDTYICEVEDQKEVQLVFGITANSHTLLQ 136
71 S-RDNKNSLYIQMN-----SLRADTAIVYCAQ-----GLD-----YWG 105
137 QSLTTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDSDGTWCTVVLQNKVERK 196
106 RGTLVTVSSASTGKPSVFPFLAPSSKSTSGG-TAALGCL----- 142
197 IDIVLAFQKASSIYKKGEQVEFSPFLAFTVEKLTGSGELMQAERASSKSWITPDL 256
143 -----VKDYFPEPVTVS-----WNSGALTSG----- 163
257 KKKKEVSVKRVTDOPKLGKGLPLHLTLPOALPOVAGSGNLTALBAKTGKLHGVNLVY 316
164 -----VH-TFPAVL-QSSGLYSLSSTVTVVSSISGTYI-- 196
317 MRATQLQKNLTCGEVWGPSPKMLSLKLENKAKVSKREKPVWVLPKAGMMQCLSDSG 376
197 -----CNV-----NHKP----- 203
377 QVLESNIKVLPTWSTPVEPKSCDKHTHTCPCPAPABELLGSPVFLPFPKPDITMISRT 436
204 -----SNTKY-----DKKVEPKSCDKHTHTCPCPAPABELLGSPVFLPFPKPDITMISRT 254
437 EYTCVAVDVSHEDPEVKFNMYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHODMLNGK 496
255 EYTCVAVDVSHEDPEVKFNMYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHODMLNGK 314
497 EYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGYGPPSDI 556
315 EYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGYGPPSDI 374
557 AVEMESNGQPENNYKTTTPVLDSDGSFELYSKLTVDKSRMQGNVFCSCVMHEALHNHT 616
375 AVEMESNGQPENNYKTTTPVLDSDGSFELYSKLTVDKSRMQGNVFCSCVMHEALHNHT 434
617 QKSLSLSPG 625
435 QKSLSLSPG 443
```

RESULT 87
US-10-704-522-6
Sequence 6, Application US/10704522
Publication No. US20040120949A1
GENERAL INFORMATION:
APPLICANT: Adolf, Gunther
APPLICANT: Baumann, Michael
APPLICANT: Heider, Karl-Heinz
TITLE OF INVENTION: Compositions and methods for treating cancer using
FILE REFERENCE: 1/1414
CURRENT APPLICATION NUMBER: US/10/704,522
CURRENT FILING DATE: 2003-11-07
PRIOR APPLICATION NUMBER: US 60/429,516
PRIOR FILING DATE: 2002-11-27
PRIOR APPLICATION NUMBER: EP 02024861
NUMBER OF SEQ ID NOS: 9
SOFTWARE: PatentIn ver. 2.1
SEQ ID NO 6

LENGTH: 444
TYPE: PR
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Humanised Murine Antibody B1W4 Heavy Chain
US-10-704-522-6

Query Match 37.4%; Score 1277.5; DB 16; Length 444;
Best Local Similarity 48.1%; Pred. No. 1.6e-81;
Matches 293; Conservative 35; Mismatches 92; Indels 189; Gaps 17;

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30 LGKKGDTVELTCTAS--QKSIQFHW-----KNSNQIKILGNQGSFL-----TKGPSKL 76
11 LKPGGSLRLSCAAGFTSSSYDMSWVRQAPGKGLVETISSGSGSYTYIYLDISIGRFTI 70
77 NDRADSRSLMDQGFPLIILKLIKEDSDTYICEVEDQKEVQLVFGITANSHTLLQ 136
71 S-RDNKNSLYIQMN-----SLRADTAIVYCAQ-----GLD-----YWG 105
137 QSLTTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDSDGTWCTVVLQNKVERK 196
106 RGTLVTVSSASTGKPSVFPFLAPSSKSTSGG-TAALGCL----- 142
197 IDIVLAFQKASSIYKKGEQVEFSPFLAFTVEKLTGSGELMQAERASSKSWITPDL 256
143 -----VKDYFPEPVTVS-----WNSGALTSG----- 163
257 KKKKEVSVKRVTDOPKLGKGLPLHLTLPOALPOVAGSGNLTALBAKTGKLHGVNLVY 316
164 -----VH-TFPAVL-QSSGLYSLSSTVTVVSSISGTYI-- 196
317 MRATQLQKNLTCGEVWGPSPKMLSLKLENKAKVSKREKPVWVLPKAGMMQCLSDSG 376
197 -----CNV-----NHKP----- 203
377 QVLESNIKVLPTWSTPVEPKSCDKHTHTCPCPAPABELLGSPVFLPFPKPDITMISRT 436
204 -----SNTKY-----DKKVEPKSCDKHTHTCPCPAPABELLGSPVFLPFPKPDITMISRT 254
437 EYTCVAVDVSHEDPEVKFNMYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHODMLNGK 496
255 EYTCVAVDVSHEDPEVKFNMYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHODMLNGK 314
497 EYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGYGPPSDI 556
315 EYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGYGPPSDI 374
557 AVEMESNGQPENNYKTTTPVLDSDGSFELYSKLTVDKSRMQGNVFCSCVMHEALHNHT 616
375 AVEMESNGQPENNYKTTTPVLDSDGSFELYSKLTVDKSRMQGNVFCSCVMHEALHNHT 434
617 QKSLSLSPG 625
435 QKSLSLSPG 443
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RESULT 88
US-10-645-215-6
Sequence 6, Application US/10645215
Publication No. US20040126379A1
GENERAL INFORMATION:
APPLICANT: Adolf, Gunther
APPLICANT: Baum, Anke
APPLICANT: Heider, Karl-Heinz
TITLE OF INVENTION: Compositions and methods for treating cancer using
FILE REFERENCE: 1/1383
CURRENT APPLICATION NUMBER: US/10/645,215
CURRENT FILING DATE: 2003-08-21
PRIOR APPLICATION NUMBER: EP 02 018 686.2
PRIOR FILING DATE: August 21, 2002
PRIOR APPLICATION NUMBER: US 60/405,956

Best Local Similarity 84.1%; Pred. No. 3.2e-81;
Matches 244; Conservative 9; Mismatches 13; Indels 24; Gaps 4;

QY 360 VLNPEAGMOCCLSD--SGOVLLESNI--KVL-----TWSTPV--E 395
DB 414 ILPPDSGVWCVSVNTAGVNEKPFNISKVLPPLNAPVVIDTGNPAVINISSEPFGE 473
QY 396 PKSCDTHTCPCPCAPBELLGGPSVFLPPPKDITLMSRTPEVTCVVVSHEDPEVKFN 455
DB 474 PKSCDTHTCPCPCAPBELLGGPSVFLPPPKDITLMSRTPEVTCVVVSHEDPEVKFN 533
QY 456 WYVDGVEVHNAKTPREQYNSTYRVSVLTVLHQMNGKEYCKCVSNKALPAPIEKT 515
DB 534 WYVDGVEVHNAKTPREQYNSTYRVSVLTVLHQMNGKEYCKCVSNKALPAPIEKT 593
QY 516 SKAKGQPREPOVYTLPPSRDELTKQVSLTCLVKGFPYSDIAVEMESNGOPENNYKTPP 575
DB 594 SKAKGQPREPOVYTLPPSRDELTKQVSLTCLVKGFPYSDIAVEMESNGOPENNYKTPP 653
QY 576 VLDSGSPFLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTKSLSPG 625
DB 654 VLDSGSPFLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTKSLSPG 703

RESULT 91
US-10-660-128-12
Sequence 12, Application US/10660128
Publication No. US20040120947A1
GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi
APPLICANT: Chundharapal, Anan
APPLICANT: Dodge, Kelly
APPLICANT: Kim, Kyung Jin
TITLE OF INVENTION: DR4 Antibodies and Uses Thereof
FILE REFERENCE: P1245R1P2B
CURRENT APPLICATION NUMBER: US/10/660,128
PRIOR FILING DATE: 2003-09-11
PRIOR APPLICATION NUMBER: US/09/584,166
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: US 09/322,875
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: US 09/237,299
PRIOR FILING DATE: 1999-01-25
PRIOR APPLICATION NUMBER: US 60/072,481
PRIOR FILING DATE: 1998-01-26
NUMBER OF SEQ ID NOS: 12
SEQ ID NO 12
LENGTH: 476
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Sequence is synthesized.
NAME/KEY: Misc_feature
LOCATION: 20
OTHER INFORMATION: Xaa may be glutamine or glutamic acid
US-10-660-128-12

Query Match 37.4%; Score 1276; DB 16; Length 476;
Best Local Similarity 48.7%; Pred. No. 2.2e-81;
Matches 291; Conservative 37; Mismatches 105; Indels 164; Gaps 16;

QY 36 TWELTTAS--QKKSIGQFWKNSNQKILGNQGSFLTKGPKSKLNDRADRSI--WDQGNF 92
DB 36 SLSTCTVSGFSLTSGVHWVROPKPGKLEMLGVIWAVSTYNSALMSRLSISKDNSKS 95
QY 93 PLTIK--NLKIEDSDTYICEVEDQKEVQLVGLTANSDTHLQ--GGSLLTLLESPPG 148
DB 96 QVFLKNSIQDTDTAMTYACAREGEFD-----YIGSSLLS-YHSMNFGQGTSTVYSSAAT 149
QY 149 SPSVOCRRPCKNGKIGKTLVSQLELQDSGTWCTVLQONKQVFKIDIVLAFQKAS 208
DB 150 TGPSVFPPLAPSSKSTSGG--TAALGCL----- 174

QY 209 SILYKKEGEVFEFPLAFVTEKLTGSGELMWQABASSKSWITFDLKNKEVSVKRTQ 268
DB 175 -----VADYFPEVTVS-----INSGALTSG----- 195
QY 269 DPKLQMKKLPRLHLTLPOALPOYAGSGLTLALBAKTGKLHOEVNLVVMRATQLOKMLTC 328
DB 196 -----VH--TFPAVL--QSSGLYSLSSVTVYPPSSLSLGTQYI-----C 229
QY 329 EYWGFTSKMLSLKLENKEAKVSKREKPVWVLPNEAGMOCCLSDSGOVLLESNIKLP 388
DB 230 NV-----NHRP-----SNTKV-- 240
QY 389 TWSTVPEKSCDKHTCPCPCAPBELLGGPSVFLPPPKDITLMSRTPEVTCVVVDVSH 448
DB 241 --DKRVEPSCDKHTCPCPCAPBELLGGPSVFLPPPKDITLMSRTPEVTCVVVDVSH 298
QY 449 DEVEKFNWYVDGVEVHNAKTPREQYNSTYRVSVLTVLHQMNGKEYCKCVSNKALP 508
DB 299 DEVEKFNWYVDGVEVHNAKTPREQYNSTYRVSVLTVLHQMNGKEYCKCVSNKALP 358
QY 509 APIEKTISKAKQPREPOVYTLPPSRDELTKQVSLTCLVKGFPYSDIAVEMESNGOPEN 568
DB 359 APIEKTISKAKQPREPOVYTLPPSRDELTKQVSLTCLVKGFPYSDIAVEMESNGOPEN 418

QY 569 NYKTPPLVDSGSPFLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTKSLSPG 625
DB 419 NYKTPPLVDSGSPFLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTKSLSPG 475

RESULT 92
US-10-050-227-4
Sequence 4, Application US/10050227
Publication No. US2003006481A1
GENERAL INFORMATION:
APPLICANT: Browne, Michael J.
Murphy, Kay E.
Chapman, Conrad G.
Clinkenbeard, Helen E.
Young, Peter R.
Shatzman, Allan R.
TITLE OF INVENTION: Novel Compounds
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: SmithKline Beecham Corporation
STREET: 709 Swedeland Road, P.O. Box 1539
CITY: King of Prussia
STATE: Pennsylvania
COUNTRY: USA
ZIP: 19406
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/050,227
FILING DATE: 16-Jan-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/200,324
FILING DATE: <Unknown>
APPLICATION NUMBER: US 08/468,296
FILING DATE: 06-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Sutton, Jeffrey A.
REGISTRATION NUMBER: 34,028
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-270-5024
TELEFAX: 610-270-5090
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:

LENGTH: 387 amino acids
TYPE: amino acid
STRANDEDNESS: <Unknown>
TOPOLOGY: linear
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-10-050-227-4

Query Match 37.4%; Score 1275.5; DB 12; Length 387;
Best Local Similarity 85.2%; Pred. No. 1.8e-81;
Matches 241; Conservative 13; Mismatches 18; Indels 11; Gaps 2;

QY 351 VSKREKPVAVLNPEAGMOCCLSDSGQVLESNIKVLPT-----MSTVPEPKSCXT 402
DB 107 LKRLDRNLWGL---AGLNSCPVKEANOSTLENFLEKLTAKTMEKSDKSSSGTEPKSADKT 163
QY 403 HTCPCPAPBELLGSGSVLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKMNVVDGVE 462
DB 164 HTCPCPAPBELLGSGSVLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKMNVVDGVE 223
QY 463 VNAATKPREEQYNSTYRVSVLTVLHODMLNGKEYCKVSNKALPAPIEKTIKAKGQP 522
DB 224 VNAATKPREEQYNSTYRVSVLTVLHODMLNGKEYCKVSNKALPAPIEKTIKAKGQP 283
QY 523 REPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTPPVLDSDGS 582
DB 284 REPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTPPVLDSDGS 343
QY 583 PFLYSKLTVDKSRMGOGNVFCSCVMHEALHNYTQKSLSLSPG 625
DB 344 PFLYSKLTVDKSRMGOGNVFCSCVMHEALHNYTQKSLSLSPG 386

RESULT 93
US-10-159-006-18

Sequence 18, Application US/10159006
Publication No. US20030143229A1
GENERAL INFORMATION:
APPLICANT: Park, John E.
APPLICANT: Garin-Cheea, Pilar
APPLICANT: Bamberger, Uwe
APPLICANT: Legger, Olivier
APPLICANT: Saldana, Jose W.
APPLICANT: Rettig, Wolfgang J.
TITLE OF INVENTION: FAPA-specific Antibody with Improved Productibility
FILE REFERENCE: 0652.1890002
CURRENT APPLICATION NUMBER: US/10/159,006
CURRENT FILING DATE: 2002-06-03
PRIOR APPLICATION NUMBER: US 09/301,593
PRIOR FILING DATE: 1999-04-29
PRIOR APPLICATION NUMBER: EP 98107925.4
PRIOR FILING DATE: 1998-04-30
PRIOR APPLICATION NUMBER: US 60/086,049
PRIOR FILING DATE: 1998-05-18
NUMBER OF SEQ ID NOS: 108
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 18
LENGTH: 453
TYPE: PRT
ORGANISM: Homo sapiens
US-10-159-006-18

Query Match 37.4%; Score 1275.5; DB 14; Length 453;
Best Local Similarity 47.8%; Pred. No. 2.3e-81;
Matches 289; Conservative 39; Mismatches 107; Indels 169; Gaps 16;

QY 30 LKKKGDYVELTCTASQKSIQF--HWKNSNQIKILGNQGSF-LYKGPESKLNDRADSRSL 86
DB 10 LVKPGASVMSCKSTRYFTETIHWQSGHSKSLSEWIGGINPNNGINPNYQKFKGRATL 69
QY 87 W---DQGNPPLIKRLKIEDSDTYICEVEDQKEVQGLVFGLTANSDPHLQ--GQSITL 141
DB 70 TVGKSSSTAYALWELRSLTSEDSAVYFC-----ARRIAYGY--DEGHANDYWGQGTSTV 119

QY 142 TLSPSSSPSSVQCRSPGRKNIQGGKTLVSVSOLELDQSGTWCTVLQNKVKEFKIDIV 201
DB 120 TVSSASTKSPSPFLPABSSKSTSGG-TAALGCL----- 151

QY 202 LAFQKASSIVYKKEGEQVEFSPLAFTVEKLTGSGELMWAERASSSKSWITPDLKKEV 261
DB 152 -----VKDYFPEPVTVS-----MNSGALTSG----- 172

QY 262 SVKAVTDQPKLQMGKKLPLHLTLPQALPOYASGNLTALAEAKTGKHQEVNLVVMBATQ 321
DB 173 -----VH-TTPAVL-QSSGLYSLSVYTVPSSTGTYI----- 205

QY 322 LQKNLTCEWGPSPKMLSLKLENKAKVSKREKPVAVLNPEAGMOCCLSDSGQVLE 381
DB 206 -----CNV-----NHKP----- 212

QY 382 SNIKVLTWSTVPEPKSCDTHTCPCPAPBELLGSGSVLFPPPKPDTLMISRTPEVTCV 441
DB 213 SNTRV---DKVPEPKSCDTHTCPCPAPBELLGSGSVLFPPPKPDTLMISRTPEVTCV 268

QY 442 VVDVSHEDPEVKFMVYDGYEVHNAKTPREEQYNSTYRVSVLTVLHODMLNGKEYCK 501
DB 269 VVDVSHEDPEVKFMVYDGYEVHNAKTPREEQYNSTYRVSVLTVLHODMLNGKEYCK 328

QY 502 VSNKALPAPIEKTIKAKGQPREQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEME 561
DB 329 VSNKALPAPIEKTIKAKGQPREQVYTLPPSRDEMTKNQVSLTCLVKGFYPSDIAVEME 388

QY 562 SNGPENNYKTTPPVLDSDGSFLYSKLTVDKSRMGOGNVFCSCVMHEALHNYTQKSL 621
DB 389 SNGPENNYKTTPPVLDSDGSFLYSKLTVDKSRMGOGNVFCSCVMHEALHNYTQKSL 448

QY 622 LSPG 625
DB 449 LSPG 452

RESULT 94
US-09-740-002-25

Sequence 25, Application US/09740002
Patent No. US2002001798A1
GENERAL INFORMATION:
APPLICANT: BRAMS, PETER
APPLICANT: MORROW, PHILIP
TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES
TITLE OF INVENTION: SPECIFIC TO RSV F-PROTEIN AND METHODS FOR THEIR
TITLE OF INVENTION: MANUFACTURE AND THERAPEUTIC USE THEREOF
FILE REFERENCE: 037003-0275759
CURRENT APPLICATION NUMBER: US/09/740,002
CURRENT FILING DATE: 2000-12-30
PRIOR APPLICATION NUMBER: 09/335,697
PRIOR FILING DATE: 1999-06-18
PRIOR APPLICATION NUMBER: 08/488,376
PRIOR FILING DATE: 1995-06-07
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 25
LENGTH: 475
TYPE: PRT
ORGANISM: Homo sapiens
US-09-740-002-25

Query Match 37.4%; Score 1275.5; DB 9; Length 475;
Best Local Similarity 46.8%; Pred. No. 2.4e-81;
Matches 298; Conservative 35; Mismatches 111; Indels 193; Gaps 16;

QY 10 LLVLQALPLPAATQGNKVVYLGKKGDYVELTCTAS-----QKSIQFHWK 54
DB 10 LVAATRVLSQVQOQESGPVVVVKPTETLTCTVSGSLSNPRMGVWIRPQKALEW- 68
QY 55 NSNDIKILGN-----QGSFLTKGPKSKLNDRADSRSLMDQGNPFLIINKLKIEDSDTYIC 109
DB 69 -----LGNIFSDSKSFSPSLKSLRLTTSODTSRS-----QVVLSTLNVDPVDTATYYC 116

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0Y 110 EVEDQKEEYVLLFVGLTASDTHL-LQGOSLTLTLESPOSSSVOCRSRGKNIQGGK 168
Db 117 -----ARGLYDINAYLYLDPWGGTLVTVSASTKGSVFLPABSSASTSGG-T 167
0Y 169 LSVSOLELQDSCGTWTCTVLQONKKEFKIDIVLAFQKASSIYKKEGEQVEFSPLAFT 228
Db 168 AALGCL-----VKQFPPEPVY 183
0Y 229 VEKLTGSGELMWOAERASSKSWITFDLKNKEVSXKRVYQDPKLTQMGKULPLHLTLPOL 288
Db 184 VS-----WNSGALITSG-----YH-TTEPAVL 202
0Y 289 POYAGSGNLTLLAEAKTGKXHOEVLVNRATOLQKNLTCEWGPPTSFKMLSLKLENKE 348
Db 203 -QSSGLSYLSSVYVTPSSISLTQTYI-----CNV----- 230
0Y 349 AKVSRKREKWWVLNBPAGMGGCLSSGVLLESNTKULPTWSTPVEPKSCDTHTCPC 408
Db 231 ----NHKP-----SNKTV-----DKKAEPSCDTHTCPC 257
0Y 409 PABELLGGBSVELFPKPXDITLMSKTPREYTCVVVDVSHDEPVKKNMYVDGVEYNAKT 468
Db 258 PABELLGGBSVFLFPKPXDITLMSKTPREYTCVVVDVSHDEPVKKNMYVDGVEYNAKT 317
0Y 469 KPREQYNSTYRVVSVLTVLHQDMLNGKEYKKCVSKAKLPAPEKITSKAKGPREBOY 528
Db 318 KPREQYNSTYRVVSVLTVLHQEMLNGKEYKKCVSKAKLPAPEKITSKAKGPREBOY 377
0Y 529 TLPERSDELTKNQVSLTCLVKGFYPSDIAVEMESNQPENNYKTPTPVLDSDSFLYSK 588
Db 378 TLPERSDELTKNQVSLTCLVKGFYPSDIAVEMESNQPENNYKTPTPVLDSDSFLYSK 437
0Y 589 LTVDSKRWQGSNVFSCSVNHEALHNHYTQKSLSLSPG 625
Db 438 LTVDSKRWQGSNVFSCSVNHEALHNHYTQKSLSLSPG 474

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1      RESULT 95
2      US-10-325-698-25
3      Sequence 25, Application US/10325698
4      Publication No. US20040076631A1
5      GENERAL INFORMATION:
6      APPLICANT: MORROW, PETER
7      APPLICANT: MORROW, PHILLIP
8      TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES
9      TITLE OF INVENTION: SPECIFIC TO RSV F-PROTEIN AND METHODS FOR THEIR
10     TITLE OF INVENTION: MANUFACTURE AND THERAPEUTIC USE THEREOF
11     FILE REFERENCE: 037003-0275759
12     CURRENT FILING DATE: 2002-12-19
13     CURRENT FILING DATE: 2002-12-19
14     PRIOR APPLICATION NUMBER: US/09/740, 002
15     PRIOR FILING DATE: 2000-12-20
16     PRIOR APPLICATION NUMBER: 09/335, 697
17     PRIOR FILING DATE: 1999-06-18
18     PRIOR APPLICATION NUMBER: 08/468, 376
19     PRIOR FILING DATE: 1995-06-07
20     NUMBER OF SEQ ID NOS: 27
21     SOFTWARE: PatentIn Ver. 2.1
22     SEQ ID NO 25
23     LENGTH: 475
24     TYPE: PRT
25     ORGANISM: Homo sapiens
26     US-10-325-698-25

```

Query Match	37.4%	Score 1275.5	DB 16	Length 475
Best Local Similarity	46.8%	Pred. No. 2.4e-81		
Matches	298	Conservative 35	Mismatches 111	Indels 193
				Gap 16
QY	10	LLVLVQLALLPAATGKNVYLGAKKDDYELTTAS-----	QKSTIQFWK	54
		: : :		
DB	10	LVAATRVLSQVLOESGVVVKPPEETLTLTCTGVGSFSLSRMGMVTWIRQPGKALEM-		68

Qy	55	NSNOIKILCN-----QGSFLTGPSEKLNDRADSRSLMDQCNFLIILKNIKIDSPSTYC	109
Db	69	-----LGNISSDEKSFSPSKRLTLTTSQDTRS-----QVLSLTINWPDVTATYIC	116
Qy	110	EVEDQKEEVOQLVFGLTANSPTH-LQGSJLTLLTLESPPGSSPSVOCRSBGRKNIOGKT	168
Db	117	-----ARVGLYDINAYLYLUDYWGGLTVTVSSASTKGFSPVFLPILASSXSTSG-T	167
Qy	169	LSVISOELODSGTCTVTLQONKVEFKIDIVLAFQASSIYTKGGEQVRSFPLAFT	228
Db	168	AALGCL-----VKDYFPEPVT	183
Qy	229	VELTGTSGELMNOAERASSKSWITFDLKNKVASVKVTDQPKLQMGKULPLHLTLPOAL	288
Db	184	VS-----MNSGALTSG-----VH-TTPAVL	202
Qy	289	POYAGSGNLTALBAKTKGLHGEVNLVVMRATOLQKNLTCEWGPRTSPKLMLSIKLENKE	348
Db	203	-QSSGLYSLSVVTYPPSSSLGTYI-----CNV-----	230
Qy	349	AKVSKREKVVWVLNBPAGMWCCLSDSGVLBSNIKYLPLWSTTPVPEKSCDHTHTCPC	408
Db	231	-----NHKP-----SNTKV-----DKKAPKSCDHTHTCPC	257
Qy	409	PABELLGGSVFLFPKPKDPTLMTSRTEPYTCVVVDVSHEDPEKFMWYVDGVEVNAKT	468
Db	258	PABELLGGSVFLFPKPKDPTLMTSRTEPYTCVVVDVSHEDPEKFMWYVDGVEVNAKT	317
Qy	469	KPREBOYNSTYVVSVLTVLHODMWLNGKEVYCKSNALPAPIEKTISKAKGQPREBOY	528
Db	318	KPREBOYNSTYVVSVLTVLHODMWLNGKEVYCKSNALPAPIEKTISKAKGQPREBOY	377
Qy	529	TLPPSDELTKNQVSLTCLVKGFYPSDIAVEMESNGOPRENNYKTTTPVLDSDGSFPLYSK	568
Db	378	TLPPSDELTKNQVSLTCLVKGFYPSDIAVEMESNGOPRENNYKTTTPVLDSDGSFPLYSK	437
Qy	589	LTYDKSRMOQGNVFGCSVWHEALHNHYTQKSLSISPG	625
Db	438	LTYDKSRMOQGNVFGCSVWHEALHNHYTQKSLSISPG	474

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RESULT 96-260A-4285
US-10-108-260A-4285
; Sequence 4285, Application US/10108260A
; Publication No. US20040005560A1
; GENERAL INFORMATION:
; APPLICANT: HELIX RESEARCH INSTITUTE
; TITLE OF INVENTION: No. US20040005560A1el full length cDNA
; FILE REFERENCE: HU-A0106
; CURRENT APPLICATION NUMBER: US/10/108,260A
; CURRENT FILING DATE: 2002-03-27
; NUMBER OF SEQ ID NOS: 5458
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4285
; LENGTH: 471
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-108-260A-4285

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Query Match      37.3%; Score 1275; DB 15; Length 477;  
Best Local Similarity   53.1%; Pred. No. 2.6e-81;  
Matches 286; Conservative 18; Mismatches 77; Indels 158; Gaps 13  
  
QY    163 IGGKTLSSVSLQLDSGTWTCTVLQNCKVEFKIDIVLAFOKAASSLVKKKEGVFES 222  
       ||| :||| |  
Db     14 ISGQ-----SQVPVSOGT-----EYKKPGASVNIS 40  
  
QY    223 F P---L AFT-----VKLTNGSGLLMQAERASSSKSWITPD LKNKYSVSRVRDPDLQ 273  
       ||| :||| |  
Db     41 CKAGYTFTTFYMVMVROAPQGCEEMWIRNPSSGRS-----SVSK-- 82  
  
QY    274 MGKLPLHLTPQLPQYAAGSNLLALEATGTCLHGEVNLVWMRAPIQLNLTQE---- 329
```

Db 83 -----FEGRLTLTADTSTTTAHMEL-----RNLTSDDTGV 112
Qy 330 -----VWGPTSPKMLSLKLENKE-----AKVSKR----- 354
Db 113 YCTTTRKMKVYRGDNDWNGQSLVIVSSASTGKSVFPLAPSSSTGCTALGCLVKD 172
Qy 355 --EKPVWV-----LNPAAGMOCCLSDSGOVLBSNIKVLPWMS----- 391
Db 173 YFBEVTVTSMNSGALTSQVHTFPVAVLOSGLVSL-SSVTVTPSSSLGTQYICVNNHKPS 231
Qy 352 -----TPVEPKSCDKHTHCPCPAPPELLGSGSVLPFPKPKDTLMISTPEVTCVVDVS 446
Db 232 NTKYDEKVEPKSCDKHTHCPCPAPPELLGSGSVLPFPKPKDTLMISTPEVTCVVDVS 291
Qy 447 HEDPEVKFNMYVDGVEVHNAAKTPREBOYNSTYRVVSVLTVLHODMLNGEKYCKVSKA 506
Db 292 HEDPEVKFNMYVDGVEVHNAAKTPREBOYNSTYRVVSVLTVLHODMLNGEKYCKVSKA 351
Qy 507 LPAPLEKTIKRAKQGPREFQVYTLPPSRDELTKQVSLTCLVKGFPSPDIIVEMESNGQP 566
Db 352 LPAPLEKTIKRAKQGPREFQVYTLPPSRDELTKQVSLTCLVKGFPSPDIIVEMESNGQP 411
Qy 567 ENNYKTTTPVLDSDGSFPLYSKLTVDKSRMOQGNVFCSSVMHEALHNYTQKSLSLSPG 625
Db 412 ENNYKTTTPVLDSDGSFPLYSKLTVDKSRMOQGNVFCSSVMHEALHNYTQKSLSLSPG 470

RESULT 97

US-10-404-724-25
; Sequence 25, Application US/10404724
; Publication No. US20030203447A1
; GENERAL INFORMATION:
; APPLICANT: Horwitz, Arnold H.
; TITLE OF INVENTION: Methods and Materials For Increasing Expression of Recombinant
; TITLE OF INVENTION: Polypeptides
; CURRENT APPLICATION NUMBER: US/10/404,724
; CURRENT FILING DATE: 2003-03-31
; PRIOR APPLICATION NUMBER: US 60/368,530
; PRIOR FILING DATE: 2002-03-29
; NUMBER OF SEQ ID NOS: 79
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 25
; LENGTH: 465
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-404-724-25

Query Match 37.3%; Score 1274.5; DB 12; Length 465;
Best Local Similarity 55.1%; Pred. No. 2.8e-81;
Matches 279; Conservative 29; Mismatches 92; Indels 106; Gaps 14;
Qy 182 WTCTVL---QNKKEFKIDIVLAFQKASSIVYKKEGEVFEFPLA---FT-----V 229
Db 3 WVTSTLLFLMAAQAQAQAIOLV-----QSGAEVKKPGEISYKSCASGYFTTKYGMNV 56
Qy 230 EKLTTSGELMWAQEAASSKSWITFDLKNKEVSVKRVQDPKLQWKKLPHLLPLQALP 289
Db 57 ROAPQGLFW-----MGHI-----NTYTERP--TYGQRF----- 83
Qy 290 QYAGSGNTLALAEATGKLHDEVLVNRATQI---QKNLTCEVWGPSPKMLSLKLE 345
Db 84 ----QGRFTFLDTSTAVLEISLSRSDPTAVYFCARFSAVDWGGTIVTVSSASTK 139
Qy 346 NKE---AKVSKR-----EKPVWV-----LNPAAGMOCCLSDSGOVL 379
Db 140 GPSVPEPLAPSSKSTGCTALGCLVKDYFPEVTVTSMNSGALTSGVHTFPVLTSSGYS 199
Qy 380 LESNIKVLPWMS-----TPVEPKSCDKHTHCPCPAPPELLGSGSV 419
Db 200 L-SSVTVTPSSSLGTQYICVNNHKPSVTKYDKRVEPKSCDKHTHCPCPAPPELLGSGSV 258
Qy 420 FLFPKPKDTLMISTPEVTCVVDVSHEDPEVKFNMYVDGVEVHNAAKTPREBOYNSTY 479

Db 259 FLFPKPKDTLMISTPEVTCVVDVSHEDPEVKFNMYVDGVEVHNAAKTPREBOYNSTY 318
Qy 480 RVSVVLTVLHODMLNGEKYCKVSKNKAALPAPIEKTISKAGQPREPOVYTLPPSRDELTK 539
Db 319 RVSVVLTVLHODMLNGEKYCKVSKNKAALPAPIEKTISKAGQPREPOVYTLPPSRDELTK 378
Qy 540 NOVSLTCLVKGFPSPDIIVEMESNGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRMOQ 599
Db 379 NOVSLTCLVKGFPSPDIIVEMESNGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRMOQ 438
Qy 600 NVFSCSVMEHALHNYTQKSLSLSPG 625
Db 439 NVFSCSVMEHALHNYTQKSLSLSPG 464

RESULT 98

US-10-452-646-9
; Sequence 9, Application US/10452646
; Publication No. US20040018593A1
; GENERAL INFORMATION:
; APPLICANT: Carton, Jill M.
; APPLICANT: Seaguet, Kimberly C.
; APPLICANT: Scallion, Bernard J.
; APPLICANT: Jili, Giles-Komar
; TITLE OF INVENTION: ANTI-REL FUSION ANTIBODIES, COMPOSITIONS, METHODS AND USES
; FILE REFERENCE: CEN0296 NP
; CURRENT APPLICATION NUMBER: US/10/452,646
; CURRENT FILING DATE: 2003-06-02
; PRIOR APPLICATION NUMBER: US 60/385,305
; PRIOR FILING DATE: 2002-06-03
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 9
; LENGTH: 367
; TYPE: PRT
; ORGANISM: homo sapiens
US-10-452-646-9

Query Match 37.3%; Score 1274; DB 15; Length 367;
Best Local Similarity 75.8%; Pred. No. 2.2e-81;
Matches 254; Conservative 17; Mismatches 28; Indels 36; Gaps 8;
Qy 326 LTCEVWGPTSP-KLMLSLKLENKAKV---SKREKPVWV--LNPE-AGMOCCL----- 371
Db 33 LEOGYSNGAHIASISLSKASTIAEYISGYQNSQPIWIGHDPQKQOQWIGAMVLY 92
Qy 372 LSDSGOVL-----LESNIKVLPWST-----PVPEKSCDKHTHCPCPA 410
Db 93 RSMGKMGKGNKHCHEMSSNNFL-TWSSNECNKRQHFLCKYRREPSPKSCDKHTHCPCPA 151
Qy 411 PELLGSPSVLPFPKPKDTLMISTPEVTCVVDVSHEDPEVKFNMYVDGVEVHNAAKTP 470
Db 152 PELLGSPSVLPFPKPKDTLMISTPEVTCVVDVSHEDPEVKFNMYVDGVEVHNAAKTP 211
Qy 471 REBOYNSTYRVVSVLTVLHODMLNGEKYCKVSKNKAALPAPIEKTISKAGQPREPOVYTL 530
Db 212 REBOYNSTYRVVSVLTVLHODMLNGEKYCKVSKNKAALPAPIEKTISKAGQPREPOVYTL 271
Qy 531 PPSRDELTKQVSLTCLVKGFPSPDIIVEMESNGQPENNYKTTTPVLDSDGSFPLYSKLT 590
Db 272 PPSRDELTKQVSLTCLVKGFPSPDIIVEMESNGQPENNYKTTTPVLDSDGSFPLYSKLT 331
Qy 591 VDKSRMOQGNVFCSSVMHEALHNYTQKSLSLSPG 625
Db 332 VDKSRMOQGNVFCSSVMHEALHNYTQKSLSLSPG 366

RESULT 99
US-10-656-769-20
; Sequence 20, Application US/10656769
; Publication No. US20040097712A1
; GENERAL INFORMATION:

```
/ APPLICANT: Varnum, Brian
/ APPLICANT: Wite, Alison
/ APPLICANT: Vezina, Chris
/ APPLICANT: Mong, Lu Min
/ APPLICANT: Qian, Xueming
/ TITLE OF INVENTION: Therapeutic Human Anti-IL-1R Monoclonal Antibody
/ FILE REFERENCE: 01,1554
/ CURRENT APPLICATION NUMBER: US/10/656,769
/ CURRENT FILING DATE: 2003-09-05
/ NUMBER OF SEQ ID NOS: 79
/ SOFTWARE: PatentIn version 3.0
/ SEQ ID NO 20
/ LENGTH: 469
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-10-656-769-20

Query Match      37.3%; Score 1273.5; DB 16; Length 469;
Best Local Similarity 48.0%; Pred. No. 3.3e-81;
Matches 294; Conservative 32; Mismatches 104; Indels 183; Gaps 16;

QY 25 GKNVYLGKGDYELCTAS--OKSIOFHMKNSNQIKILGNQGSFLTYGPKLN----- 77
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
DB 27 GGGV--QGRSLRLSCAASGFTFSNYGMHWQAPGKLEWVAGIMNDGINKYHAHSVR 84
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
QY 78 -----DRADSRRLMDQGNPLIKIKIEDSDTYICEVEDOKEEYQLLVFGLTANSQTH 132
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
DB 85 GRTTRRDSKNTLYQNMSP-----RAEDTAVYCA--RRKSRDMLFE----- 127
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
QY 133 LLOGSGLTLLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSGTWCTVLQNOQK 192
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
DB 128 -FWGGTTLTVSASATKSPSVFPLAPSSKSTSGG-TAALGCL----- 167
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
QY 193 VEFKIDIVLAFQKASSIYKKEGEOVERFPLAFVVEKLTGSGELMWAQERASSKSWI 252
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
DB 168 -----VKDYFPEPVTVS-----MNSGALTSG----- 188
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
QY 253 TFDLKNKEVSVKRVTDPRKLQMGKKLPLHLTLPOALPOYAGSGNLTALAEATGKXHOEV 312
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
DB 189 -----VH-TTPAVL-QSSGLYSLSVTVPSSSLGTQT 219
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
QY 313 NUVMRATQLOKNTLTCENVGPTSPKLMLSIKLENKEAKVSKREKPYVVLNPEAGMQLL 372
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
DB 220 YI-----CNV-----NHKP----- 228
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
QY 373 SSGGVULESNIKVLTWSTPVEPKSCDTHTCPPAPABELLGGPSVFLPPPKQDTLMI 432
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
DB 229 -----SNTKV-----DKVPEPKSCDTHTCPPAPABELLGGPSVFLPPPKQDTLMI 275
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
QY 433 SRTPEVTCVVVDVSHEDPEVKFMWYVDGVEVHNAKTKPRREOYNSYRYSVLTIVLHODW 492
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
DB 276 SRTPEVTCVVVDVSHEDPEVKFMWYVDGVEVHNAKTKPRREOYNSYRYSVLTIVLHODW 335
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
QY 493 LNGKEYKCVSNKALPAPIEKTSKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFF 552
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
DB 336 LNGKEYKCVSNKALPAPIEKTSKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFF 395
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
QY 553 PSDIAVEMESNGQPENNYKTTTPPVLDSDGSPFLYSKLTVDKSRMOQGNVFGSCVMHEALH 612
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
DB 396 PSDIAVEMESNGQPENNYKTTTPPVLDSDGSPFLYSKLTVDKSRMOQGNVFGSCVMHEALH 455
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
QY 613 NHYTKSLSLSPG 625
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
DB 456 NHYTKSLSLSPG 468
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :

RESULT 100
US-10-363-427-10
/ Sequence 10, Application US/10363427
/ Publication No. US20030195338A1
/ GENERAL INFORMATION:
/ APPLICANT: Medexgen Inc.
/ APPLICANT: CHUNG, Yong Hoon
```

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/ APPLICANT: HAN, Ji Woong
/ APPLICANT: LEE, Hye Ja
/ APPLICANT: CHOI, Eun Yong
/ APPLICANT: KIM, Jin Mi
/ APPLICANT: YIM, Soo Bin
/ TITLE OF INVENTION: Concatameric Immunoadhesion
/ FILE REFERENCE:
/ CURRENT APPLICATION NUMBER: US/10/363,427
/ CURRENT FILING DATE: 2003-02-28
/ NUMBER OF SEQ ID NOS: 52
/ SOFTWARE: KopatentIn 1.71
/ SEQ ID NO 10
/ LENGTH: 608
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-10-363-427-10

Query Match      37.3%; Score 1273.5; DB 14; Length 608;
Best Local Similarity 83.3%; Pred. No. 4.7e-81;
Matches 244; Conservative 8; Mismatches 28; Indels 13; Gaps 2;

QY 346 NKEAVSKREKPVWVLNPEAGM-----OCLSDSGQVLE-----SNIKVLPWTST 392
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
DB 345 NGTVHLSCQEKQNTVCTCHAGFFLRENECVSCSNCKSLLECTKLCLOIENYKGTEDSGT 374
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
QY 393 PVEPKSCDTHTCPPCPAPABELLGGPSVFLPPPKQDTLMIISTPPEVTCVVVDVSHEDPEV 452
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
DB 375 TAEPKSCDTHTCPPCPAPABELLGGPSVFLPPPKQDTLMIISTPPEVTCVVVDVSHEDPEV 434
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
QY 453 KENWYVDGVEVHNAKTKPREEOYNSTRYVSVLTIVLHODWLNKKEYKCVSNKALPAPIE 512
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
DB 435 KENWYVDGVEVHNAKTKPREEOYNSTRYVSVLTIVLHODWLNKKEYKCVSNKALPAPIE 494
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
QY 513 KTSKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFFPSDIAVEMESNGQPENNYKT 572
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
DB 495 KTSKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFFPSDIAVEMESNGQPENNYKT 554
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
QY 573 TTPPVLDSDGSPFLYSKLTVDKSRMOQGNVFGSCVMHEALHNNHYTKSLSLSPG 625
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
DB 555 TTPPVLDSDGSPFLYSKLTVDKSRMOQGNVFGSCVMHEALHNNHYTKSLSLSPG 607
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :

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OM protein - protein search, using sw model

Run on: August 3, 2004, 13:01:34 ; Search time 19.0695 Seconds
(without alignments)
1754.300 Million cell updates/sec

Title: SEQ3
Perfect score: 3414
Sequence: 1 MNRGVPRHLLVLQLALLP.....DETCAADQDELGLDGLWTTDP 648

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 125 summaries

Database : Issued Patents AA:*
1: /cgn2_6/prodata/2/1aa/5A_COMB.pep:*
2: /cgn2_6/prodata/2/1aa/5B_COMB.pep:*
3: /cgn2_6/prodata/2/1aa/6A_COMB.pep:*
4: /cgn2_6/prodata/2/1aa/6B_COMB.pep:*
5: /cgn2_6/prodata/2/1aa/PCTUS_COMB.pep:*
6: /cgn2_6/prodata/2/1aa/Backfile1.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	3231	94.6	630	4	US-08-472-888A-6 Sequence 6, Appli
2	2151	63.0	530	3	US-08-477-460B-4 Sequence 4, Appli
3	2151	63.0	530	3	US-08-477-516-4 Sequence 4, Appli
4	2151	63.0	530	3	US-09-329-916-4 Sequence 4, Appli
5	2151	63.0	530	3	US-08-485-372A-4 Sequence 4, Appli
6	2151	63.0	530	4	US-09-409-006A-4 Sequence 4, Appli
7	2151	63.0	530	4	US-08-484-681-4 Sequence 4, Appli
8	2151	63.0	530	5	PCT-US93-07422-4 Sequence 4, Appli
9	2077	60.8	432	3	US-08-477-460B-2 Sequence 2, Appli
10	2077	60.8	432	3	US-08-379-516-2 Sequence 2, Appli
11	2077	60.8	432	3	US-09-329-916-2 Sequence 2, Appli
12	2077	60.8	432	4	US-08-485-372A-2 Sequence 2, Appli
13	2077	60.8	432	4	US-09-409-006A-2 Sequence 2, Appli
14	2077	60.8	432	4	US-08-484-681-2 Sequence 2, Appli
15	2077	60.8	432	5	PCT-US93-07422-2 Sequence 2, Appli
16	2039	59.7	532	2	US-08-417-495-6 Sequence 6, Appli
17	2039	59.7	532	2	US-08-284-391B-6 Sequence 6, Appli
18	2039	59.7	532	3	US-09-218-950-6 Sequence 6, Appli
19	2039	59.7	532	5	PCT-US92-01785-6 Sequence 6, Appli
20	2039	59.7	532	5	PCT-US95-00454-6 Sequence 6, Appli
21	2039	59.7	575	2	US-08-417-495-4 Sequence 4, Appli
22	2039	59.7	575	2	US-08-284-391B-4 Sequence 4, Appli
23	2039	59.7	575	3	US-09-218-950-4 Sequence 4, Appli
24	2039	59.7	575	5	PCT-US92-01785-4 Sequence 4, Appli
25	2039	59.7	575	5	PCT-US95-00454-4 Sequence 4, Appli
26	2038	59.7	458	3	US-08-466-368-4 Sequence 4, Appli
27	2035	59.6	462	2	US-08-417-495-5 Sequence 5, Appli
28	2035	59.6	462	2	US-08-284-391B-5 Sequence 5, Appli
29	2035	59.6	462	3	US-09-218-950-5 Sequence 5, Appli
30	2035	59.6	462	5	PCT-US92-01785-5 Sequence 5, Appli
31	2035	59.6	462	5	PCT-US95-00454-5 Sequence 5, Appli
32	2030	59.5	457	4	US-08-328-500-9 Sequence 9, Appli
33	2029	59.4	398	2	US-08-284-391B-29 Sequence 29, Appli
34	2029	59.4	398	3	US-09-218-950-29 Sequence 29, Appli
35	2024	59.3	458	3	US-09-039-555B-15 Sequence 15, Appli
36	2017	59.1	402	1	US-08-236-311-1 Sequence 1, Appli
37	2017	59.1	402	3	US-08-457-918-1 Sequence 1, Appli
38	2016	59.1	458	4	US-09-517-605-3 Sequence 3, Appli
39	2001	58.6	394	3	US-08-466-368-2 Sequence 2, Appli
40	2001	58.6	394	4	US-08-328-500-2 Sequence 2, Appli
41	1998	58.5	458	6	5223394-7 Parent No. 5223394
42	1951	57.1	394	6	5223394-7 Parent No. 5223394
43	1904	55.8	434	1	US-08-236-311-4 Sequence 4, Appli
44	1904	55.8	434	3	US-08-457-918-4 Sequence 4, Appli
45	1901	55.7	433	2	US-08-867-149-1 Sequence 1, Appli
46	1901	55.7	433	2	US-08-808-374-1 Sequence 1, Appli
47	1896	55.5	433	3	US-09-100-409A-1 Parent No. 5171838
48	1704	48.9	433	6	5171838-13 Parent No. 5171838
49	1599.5	46.9	410	3	US-08-630-172-17 Sequence 17, Appli
50	1599.5	46.9	410	3	US-09-375-419-17 Sequence 17, Appli
51	1385	40.6	254	2	US-08-284-391B-33 Sequence 33, Appli
52	1385	40.6	254	3	US-09-218-950-33 Sequence 33, Appli
53	1368	40.1	318	6	5223394-11 Parent No. 5223394
54	1363	38.9	295	6	5223394-9 Parent No. 5223394
55	1260	38.7	592	4	US-09-313-942-8 Sequence 8, Appli
56	1292	37.8	622	4	US-09-499-846-2 Sequence 2, Appli
57	1288.5	37.7	459	1	US-08-157-101A-7 Sequence 7, Appli
58	1286.5	37.7	446	3	US-08-397-411-7 Sequence 7, Appli
59	1281.5	37.5	497	4	US-09-499-846-6 Sequence 6, Appli
60	1281.5	37.5	525	4	US-09-499-846-4 Sequence 4, Appli
61	1278.5	37.4	454	2	US-07-934-373C-22 Sequence 22, Appli
62	1278.5	37.4	454	3	US-08-437-642B-22 Sequence 22, Appli
63	1278.5	37.4	454	4	US-08-146-206C-22 Sequence 22, Appli
64	1278.5	37.4	454	4	US-09-705-686-22 Sequence 22, Appli
65	1278.5	37.4	454	5	PCT-US93-07032-22 Sequence 22, Appli
66	1277.5	37.4	473	3	US-09-048-672A-4 Sequence 4, Appli
67	1277	37.4	704	4	US-09-590-656-2 Sequence 2, Appli
68	1277	37.4	704	4	US-09-733-764-2 Sequence 2, Appli
69	1275.5	37.4	487	1	US-08-470-299-4 Sequence 4, Appli
70	1275.5	37.4	453	4	US-09-301-593-18 Sequence 18, Appli
71	1275.5	37.4	475	4	US-09-740-002-25 Sequence 25, Appli
72	1275	37.3	442	4	US-08-472-888A-7 Sequence 7, Appli
73	1275	37.3	442	5	PCT-US96-10043-9 Sequence 9, Appli
74	1272.5	37.3	475	4	US-09-740-002-27 Sequence 27, Appli
75	1272.5	37.3	680	3	US-08-227-456C-15 Sequence 15, Appli
76	1270	37.2	476	3	US-08-487-550-12 Sequence 12, Appli
77	1270	37.2	476	4	US-09-526-098-12 Sequence 12, Appli
78	1270	37.2	488	4	US-09-499-846-12 Sequence 12, Appli
79	1269	37.2	396	2	US-08-784-512-3 Sequence 3, Appli
80	1269	37.2	449	1	US-09-176-228-3 Sequence 3, Appli
81	1269	37.2	449	1	US-08-458-516-13 Sequence 13, Appli
82	1269	37.2	472	4	US-09-301-593-30 Sequence 30, Appli
83	1268.5	37.2	424	5	PCT-US95-03866-12 Sequence 12, Appli
84	1268.5	37.2	424	5	PCT-US95-03866-14 Sequence 14, Appli
85	1268.5	37.2	468	4	US-09-485-737B-67 Sequence 67, Appli
86	1268.5	37.2	711	4	US-09-485-737B-90 Sequence 90, Appli
87	1268.5	37.2	951	4	US-09-313-942-9 Sequence 9, Appli
88	1268	37.1	451	4	US-09-247-352-3 Sequence 3, Appli
89	1268	37.1	451	4	US-09-466-635-3 Sequence 3, Appli
90	1268	37.1	472	4	US-09-301-593-43 Sequence 43, Appli
91	1267.5	37.1	360	4	US-09-180-100-11 Sequence 11, Appli
92	1267.5	37.1	376	4	US-09-180-100-22 Sequence 22, Appli
93	1267.5	37.1	452	3	US-09-027-449-71 Sequence 71, Appli
94	1267.5	37.1	452	3	US-09-026-985-71 Sequence 71, Appli
95	1267.5	37.1	452	4	US-09-121-952A-71 Sequence 71, Appli
96	1267.5	37.1	452	4	US-09-234-340A-71 Sequence 71, Appli
97	1267.5	37.1	453	4	US-09-532-856-6 Sequence 6, Appli
98	1267.5	37.1	453	4	US-09-524-100C-6 Sequence 6, Appli
99	1267.5	37.1	488	3	US-08-776-511-2 Sequence 2, Appli
100	1267	37.1	388	3	US-09-131-247-16 Sequence 16, Appli

101	1266.5	37.1	497	4	US-09-499-846-10	Sequence 10, Appl
102	1266.5	37.1	525	4	US-09-499-846-8	Sequence 8, Appl
103	1266	37.1	1	4	US-08-236-311-7	Sequence 7, Appl
104	1266	37.1	371	3	US-08-457-918-7	Sequence 7, Appl
105	1266	37.1	451	2	US-08-887-352B-18	Sequence 18, Appl
106	1266	37.1	451	3	US-09-109-207C-18	Sequence 18, Appl
107	1266	37.1	451	3	US-09-282-505-2	Sequence 2, Appl
108	1266	37.1	451	3	US-09-054-255-2	Sequence 2, Appl
109	1266	37.1	451	3	US-09-296-005-18	Sequence 18, Appl
110	1266	37.1	451	4	US-09-282-846-2	Sequence 2, Appl
111	1266	37.1	451	4	US-09-680-145-2	Sequence 2, Appl
112	1266	37.1	451	4	US-09-920-171-18	Sequence 18, Appl
113	1266	37.1	476	2	US-08-378-939-10	Sequence 10, Appl
114	1266	37.1	547	4	US-09-746-359A-54	Sequence 54, Appl
115	1266	37.1	571	4	US-09-746-359A-53	Sequence 53, Appl
116	1265.5	37.1	467	3	US-09-049-672A-8	Sequence 8, Appl
117	1263.5	37.0	462	4	US-09-289-942A-7	Sequence 7, Appl
118	1263	37.0	442	1	US-08-461-968A-5	Sequence 5, Appl
119	1263	37.0	442	2	US-08-462-571-5	Sequence 5, Appl
120	1263	37.0	453	3	US-08-466-151-8	Sequence 8, Appl
121	1263	37.0	453	4	US-08-466-163B-8	Sequence 8, Appl
122	1263	37.0	453	4	US-09-802-096-8	Sequence 8, Appl
123	1262	37.0	476	3	US-08-487-550-4	Sequence 4, Appl
124	1262	37.0	476	4	US-09-526-098-4	Sequence 4, Appl
125	1262	37.0	478	3	US-08-487-550-8	Sequence 8, Appl

ALIGNMENTS

RESULT 1
US-08-472-888A-6
Sequence 6, Application US/08472888A
Patent No. 6613746

GENERAL INFORMATION:

APPLICANT: Seed, Brian
APPLICANT: Walz, Gerd
TITLE OF INVENTION: AGP-ANTIBODY FUSION PROTEINS
TITLE OF INVENTION: AND RELATED MOLECULES AND METHODS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Clark & Elbing LLP
STREET: 176 Federal Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/472,888A
FILING DATE: 07-JUN-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/618,314
FILING DATE: 23-NOV-1990
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/258001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045

INFORMATION FOR SEQ ID NO: 6:

SEQUENCE CHARACTERISTICS:
LENGTH: 630 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: linear

MOLECULE TYPE: protein
US-08-472-888A-6
Query Match 94.6%; Score 3231; DB 4; Length 630;
Best Local Similarity 98.4%; Pred. NO. 5.1e-252;
Matches 621; Conservative 0; Mismatches 2; Indels 8; Gaps 3;

Qy	1	MNRGVPRRHLLVLTALPAATCGNKVVLGKKGTDELCTTASQKSIQFMWNSNQIK	60
Db	1	MNRGVPRRHLLVLTALPAATCGNKVVLGKKGTDELCTTASQKSIQFMWNSNQIK	60
Qy	61	ILNQGSFLLTKGPKSLNDRADSRSLMDQGNFLLINLKI ESDTYICEVEDKKEVQL	120
Db	61	ILNQGSFLLTKGPKSLNDRADSRSLMDQGNFLLINLKI ESDTYICEVEDKKEVQL	120
Qy	121	LVFGLTNSPTHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG	180
Db	121	LVFGLTNSPTHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG	180
Qy	181	TWTCVVLQNKVKEFKIDIVLAFQKASSIVYKKEGQVEFSPPLAFTVEKLTGSGELMW	240
Db	181	TWTCVVLQNKVKEFKIDIVLAFQKASSIVYKKEGQVEFSPPLAFTVEKLTGSGELMW	240
Qy	241	TWTCVVLQNKVKEFKIDIVLAFQKASSIVYKKEGQVEFSPPLAFTVEKLTGSGELMW	300
Db	241	TWTCVVLQNKVKEFKIDIVLAFQKASSIVYKKEGQVEFSPPLAFTVEKLTGSGELMW	300
Qy	301	LEAKTGKHOEVLVVMRATQLOKNTCEVWGPSPKLMSTLKENKEAKVSKREKPVWV	360
Db	301	LEAKTGKHOEVLVVMRATQLOKNTCEVWGPSPKLMSTLKENKEAKVSKREKPVWV	360
Qy	361	LNPEAGMOCILSDSGVLLSNIKVLPTWSTPV-----EPKSCDKTHTCPPCPAEEL	414
Db	361	LNPEAGMOCILSDSGVLLSNIKVLPTWSTPVHADPEBEPKSCDKTHTCPPCPAEEL	420
Qy	415	GGPSVFLFPPPKDITLISRTPEYTCVVVDVSHEDPEVKRWYVDGVEVNAKTKPREEQ	474
Db	415	GGPSVFLFPPPKDITLISRTPEYTCVVVDVSHEDPEVKRWYVDGVEVNAKTKPREEQ	479
Qy	475	YNSYRVSVLTVLHODMLNGKEYCKVSNKALPAPIEKITSKAGQPREPOVYTLPPSR	534
Db	480	YNSYRVSVLTVLHODMLNGKEYCKVSNKALPAPIEKITSKAGQPREPOVYTLPPSR	538
Qy	535	DELTKNQVSLTCLVKGFYPSDIAVEMESNQCPENNYKTTTPVLDSDGSFPLYSKLTVDKS	594
Db	539	DELTKNQVSLTCLVKGFYPSDIAVEMESNQCPENNYKTTTPVLDSDGSFPLYSKLTVDKS	598
Qy	595	RWQGNVFSQSVWHEALHNHYTQKSLSLSPG	625
Db	599	RWQGNVFSQSVWHEALHNHYTQKSLSLSPG	629

RESULT 2

US-08-477-460B-4
Sequence 4, Application US/08477460B
Patent No. 6034223

GENERAL INFORMATION:

APPLICANT: Progenics Pharmaceuticals, Inc.
TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10112

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.24

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/477,460B
FILING DATE: 07-JUN-1995
CLASSIFICATION: 530
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 07/927,931
FILING DATE: 07-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPW/AJM
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 977-9550
TELEFAX: (212) 977-9809
TELEX: 422523 COOP UT
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 530 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-08-477-460B-4

Query Match 63.0%; Score 2151; DB 3; Length 530;
Best Local Similarity 70.4%; Pred. No. 4.6e-165;
Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

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QY 1 MNRGVPFRHLLVLTOLALLPAATQGNKVYLGKKGDTVELTCTASQKSIQFHMKNSNOIK 60
DB 1 MNRGVPFRHLLVLTOLALLPAATQGNKVYLGKKGDTVELTCTASQKSIQFHMKNSNOIK 60
QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIKLIKIEDSPDYICEVEDQKEEYQL 120
DB 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIKLIKIEDSPDYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDFHLLQGGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDFHLLQGGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVTLQNOKKVEKIDIVVLAFOKASSIYKKKEGEVEFSPLAFVYBKLTSGGELMW 240
DB 181 TWTCVTLQNOKKVEKIDIVVLAFOKASSIYKKKEGEVEFSPLAFVYBKLTSGGELMW 240
QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTDOPKLOMGKCLPLHLTLPOALPOYAG---SGNL 297
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTDOPKLOMGKCLPLHLTLPOALPOYAG---SGNL 297
QY 298 TLALBAKTGKLEHGVNLYVMRATOL-QKNLTCEVMGPTSPKMLSLKLENKEAKVSKREK 356
DB 298 TLALBAKTGKLEHGVNLYVMRATOL-QKNLTCEVMGPTSPKMLSLKLENKEAKVSKREK 356
QY 357 PAVVAVLPAAGMOCCLSDSGOVLLESNITKYLPTMSTPVEPKSCDKHTHTCPCPAPALLGG 416
DB 357 PAVVAVLPAAGMOCCLSDSGOVLLESNITKYLPTMSTPVEPKSCDKHTHTCPCPAPALLGG 416
QY 417 PSVFLFPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKFMWYVDGVEVNAATKPREEOYN 476
DB 417 PSVFLFPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKFMWYVDGVEVNAATKPREEOYN 476
QY 477 STYRVVSVLTIVHODMLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPOVYTLPPSRDE 536
DB 477 STYRVVSVLTIVHODMLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPOVYTLPPSRDE 536
QY 537 LTRKQVSLTCLVKGFPYSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTIVYDKSRW 596
DB 537 LTRKQVSLTCLVKGFPYSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTIVYDKSRW 596
QY 597 QCGNVFSCSVMEALHNHYTOKSLSLSPG 625
DB 597 QCGNVFSCSVMEALHNHYTOKSLSLSPG 625
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DB 501 QCGNVFSCSVMEALHNHYTOKSLSLSPG 529

RESULT 3
US-08-379-516-4
Sequence 4, Application US/08379516
Patent No. 6083478
GENERAL INFORMATION:
APPLICANT: Allaway, Graham P.
APPLICANT: Maddon, Paul J.
TITLE OF INVENTION: No. 6083478-Peptide1 Moietly-Conjugated CD4-Gamma2 and CD4-1gG2
TITLE OF INVENTION: Immunocnjugates and Uses Thereof
FILE REFERENCE: 41215-A-PCT-US
CURRENT APPLICATION NUMBER: US/08/379,516
CURRENT FILING DATE: 1996-06-10
EARLIER APPLICATION NUMBER: PCT/US93/07422
EARLIER FILING DATE: 1993-08-06
EARLIER APPLICATION NUMBER: 07/927,931
EARLIER FILING DATE: 1992-08-07
NUMBER OF SEQ ID NOS: 9
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 4
LENGTH: 530
TYPE: PRT
ORGANISM: Homo sapiens
US-08-379-516-4

Query Match 63.0%; Score 2151; DB 3; Length 530;
Best Local Similarity 70.4%; Pred. No. 4.6e-165;
Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

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QY 1 MNRGVPFRHLLVLTOLALLPAATQGNKVYLGKKGDTVELTCTASQKSIQFHMKNSNOIK 60
DB 1 MNRGVPFRHLLVLTOLALLPAATQGNKVYLGKKGDTVELTCTASQKSIQFHMKNSNOIK 60
QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIKLIKIEDSPDYICEVEDQKEEYQL 120
DB 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIKLIKIEDSPDYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDFHLLQGGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDFHLLQGGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVTLQNOKKVEKIDIVVLAFOKASSIYKKKEGEVEFSPLAFVYBKLTSGGELMW 240
DB 181 TWTCVTLQNOKKVEKIDIVVLAFOKASSIYKKKEGEVEFSPLAFVYBKLTSGGELMW 240
QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTDOPKLOMGKCLPLHLTLPOALPOYAG---SGNL 297
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTDOPKLOMGKCLPLHLTLPOALPOYAG---SGNL 297
QY 298 TLALBAKTGKLEHGVNLYVMRATOL-QKNLTCEVMGPTSPKMLSLKLENKEAKVSKREK 356
DB 298 TLALBAKTGKLEHGVNLYVMRATOL-QKNLTCEVMGPTSPKMLSLKLENKEAKVSKREK 356
QY 357 PAVVAVLPAAGMOCCLSDSGOVLLESNITKYLPTMSTPVEPKSCDKHTHTCPCPAPALLGG 416
DB 357 PAVVAVLPAAGMOCCLSDSGOVLLESNITKYLPTMSTPVEPKSCDKHTHTCPCPAPALLGG 416
QY 417 PSVFLFPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKFMWYVDGVEVNAATKPREEOYN 476
DB 417 PSVFLFPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKFMWYVDGVEVNAATKPREEOYN 476
QY 477 STYRVVSVLTIVHODMLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPOVYTLPPSRDE 536
DB 477 STYRVVSVLTIVHODMLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPOVYTLPPSRDE 536
QY 537 LTRKQVSLTCLVKGFPYSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTIVYDKSRW 596
DB 537 LTRKQVSLTCLVKGFPYSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTIVYDKSRW 596
QY 597 QCGNVFSCSVMEALHNHYTOKSLSLSPG 625
DB 597 QCGNVFSCSVMEALHNHYTOKSLSLSPG 625
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Db 501 OQGNVFCSVNHEALHNHYTQKSLSLSPG 529

RESULT 4
US-09-329-916-4
Sequence 4, Application US/09329916
Patent No. 617549
GENERAL INFORMATION:
APPLICANT: Progenics Pharmaceuticals, Inc.
TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
TITLE OF INVENTION: CD4-GAMMA2 AND CD4-1G62 IMMUNOCONJUGATES, AND USES THEREOF
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10112
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/329,916
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/477,460
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 07/927,931
FILING DATE: 07-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPM/ALM
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 977-9550
TELEFAX: (212) 977-9809
TELEX: 422523 COOP UT
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 530 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-09-329-916-4

Query Match 63.0%; Score 2151; DB 3; Length 530;
Best Local Similarity 70.4%; Pred. No. 4,6e-165;
Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

QY 1 NMRGVPFPHLLVLTGALLPATOQNKVVLGKKGDTVELTCTASQKSIQPHMKNQNIK 60
Db 1 NMRGVPFPHLLVLTGALLPATOQKVVVLGKKGDTVELTCTASQKSIQPHMKNQNIK 60
QY 61 ILGNQGSFLTKGSPSLNDRASRRSLMDQGNFPLIIKNIKIEDSDTYICEVEDQKEEYQL 120
Db 61 ILGNQGSFLTKGSPSLNDRASRRSLMDQGNFPLIIKNIKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSPTHLLQGSITLTLESPPGSSPSVQCRSPRGKNIQCGKTLVSQLELQDSG 180
Db 121 LVFGLTANSPTHLLQGSITLTLESPPGSSPSVQCRSPRGKNIQCGKTLVSQLELQDSG 180
QY 181 TWTCTVLONOKKVEKRIIVVLAFAKASSIYKKEGEQVEPSFLAFVEKLTGSGELMW 240
Db 181 TWTCTVLONOKKVEKRIIVVLAFAKASSIYKKEGEQVEPSFLAFVEKLTGSGELMW 240
QY 191 TWTCTVLONOKKVEKRIIVVLAFAKASSIYKKEGEQVEPSFLAFVEKLTGSGELMW 240
Db 191 TWTCTVLONOKKVEKRIIVVLAFAKASSIYKKEGEQVEPSFLAFVEKLTGSGELMW 240

QY 241 QAERASSKSWITFDLKNKEVSVKRVYQDPKLGKCLPLHLTPALPOYAG--SGNL 297
Db 217 -----PCSRSTSESTALGCLVKDYFPPEPVTVSNMGALTSGVH 255
QY 298 TLALBAKTGLHQEVNLVWBARQL-QKNLTCEVWGTPSPRLMLSLLENBAEAYSREK 356
Db 256 TFPVAVLQSSGLIYSSVTVTPSSNFGTYTCNV-----DHK 292
QY 357 PVMVLNDEAGMWQCLLSDSQVLLSNIKVLPTWSTVEPEKSCDKHTCPCPAPELLGG 416
Db 293 P-----SNTKYDKT-----VERKCCV-----CPCCPAP--VAG 320
QY 417 PSVFLPFPKPKDMLMISRTPEVTCVVVDVSHEDPEVKFMNYVDGVEVHNAKTKRREQYN 476
Db 321 PSVFLPFPKPKDMLMISRTPEVTCVVVDVSHEDPEVQFMNYVDGVEVHNAKTKRREQYN 380
QY 477 STYRVSVLTLYLHODMVLNGEKYKCKVSNKLLPAPIEKTISKAKGQPREPQVYTLPPSRDE 536
Db 381 STYRVSVLTLYLHODMVLNGEKYKCKVSNKLLPAPIEKTISKAKGQPREPQVYTLPPSRDE 440
QY 537 LTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPPVLDSDGSFFLYSKLTVDKSRW 596
Db 441 MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPPVLDSDGSFFLYSKLTVDKSRW 500
QY 597 OQGNVFCSVNHEALHNHYTQKSLSLSPG 625
Db 501 OQGNVFCSVNHEALHNHYTQKSLSLSPG 529

RESULT 5
US-08-485-372A-4
Sequence 4, Application US/08485372A
Patent No. 6187748
GENERAL INFORMATION:
APPLICANT: Beaudry, Gary A.
APPLICANT: Madden, Paul J.
TITLE OF INVENTION: CD4-GAMMA2 CD4-1G62 CHIMERAS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham LLP
STREET: 1185 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,372A
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/476,227
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 37690-II-A
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 278-0400
TELEFAX: (212) 391-0525
TELEX:
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 530 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:

ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-08-485-372A-4

Query Match 63.0%; Score 2151; DB 3; Length 530;
Best Local Similarity 70.4%; Pred. No. 4.6e-165;
Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

QY 1 NMRGVFPHLLLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKSIQPHMKNNOIK 60
DB 1 NMRGVFPHLLLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKSIQPHMKNNOIK 60
QY 61 ILGNQGSFLTKGSPSKLNDRAISRSLMDQGNFPLIKLKIEDSDTYICEVEDQKEEYOL 120
DB 61 ILGNQGSFLTKGSPSKLNDRAISRSLMDQGNFPLIKLKIEDSDTYICEVEDQKEEYOL 120
QY 121 LVFGLTANSDDLHLLQGGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDDLHLLQGGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWCTCTVLQOKKVEFKIDIVVLAFOKASSIVYKKEGOVEFSPPLAFVTEKLTGSGELMW 240
DB 181 TWCTCTVLQOKKVEFKIDIVVLAFOKASSIVYKKEGOVEFSPPLAFVTEKLTGSGELMW 240
QY 241 QAERASSSKSWITTFDLKNKEVSVKRVTPDKLQMGKRLPLHLTPQALPOYAG---SGNL 297
DB 241 QAERASSSKSWITTFDLKNKEVSVKRVTPDKLQMGKRLPLHLTPQALPOYAG---SGNL 297
QY 217 -----PCSRSTSESTALGCLVADYFPEPVTVSMNSGALTSGVH 255
DB 217 -----PCSRSTSESTALGCLVADYFPEPVTVSMNSGALTSGVH 255
QY 298 TLALEAKTGKLEHOEYNLVVMRATOL-QKNLTCEVWGPTSPKMLSLKLENKAKVSKREK 356
DB 298 TLALEAKTGKLEHOEYNLVVMRATOL-QKNLTCEVWGPTSPKMLSLKLENKAKVSKREK 356
QY 256 TEPVALQSSGLYSSLVTVPSNFGTQTYTCNV-----DHK 292
DB 256 TEPVALQSSGLYSSLVTVPSNFGTQTYTCNV-----DHK 292
QY 357 PWMVLNPAAGMOCCLSDSGOVLLESNITKVLPTWSTPVEPKSCDKTHTCPCPAPELLGG 416
DB 293 P-----SNTKYVDKLT---VERKCCVE---CPCCPAP-VAG 320

QY 417 PSVFLFPPKPDITLMISRTPEVTCVVVDVSHEDPEVKFMVYDGEVNAKTKPREEOYN 476
DB 321 PSVFLFPPKPDITLMISRTPEVTCVVVDVSHEDPEVKFMVYDGEVNAKTKPREEOYN 380
QY 477 STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 536
DB 381 STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 440
QY 537 LTRKQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTPRVLDSDGFFFLYSKLTVDKSRW 596
DB 441 LTRKQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTPRVLDSDGFFFLYSKLTVDKSRW 500
QY 597 QGGNVFSCSVMHGALHNHYTOKSLSLSPG 625
DB 501 QGGNVFSCSVMHGALHNHYTOKSLSLSPG 529

RESULT 6
US-09-409-006A-4
Sequence 4, Application US/09409006A
Patent No. 6342586
GENERAL INFORMATION:
APPLICANT: Progenics Pharmaceuticals, Inc.
TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10112
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/409,006A
FILING DATE: 29-SEP-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/927,931
FILING DATE: 07-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPW/AJM
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 977-9550
TELEFAX: (212) 977-9809
TELEX: 422523 COOP UT
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 530 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: CDNA
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-09-409-006A-4

Query Match 63.0%; Score 2151; DB 4; Length 530;
Best Local Similarity 70.4%; Pred. No. 4.6e-165;
Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

QY 1 NMRGVFPHLLLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKSIQPHMKNNOIK 60
DB 1 NMRGVFPHLLLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKSIQPHMKNNOIK 60
QY 61 ILGNQGSFLTKGSPSKLNDRAISRSLMDQGNFPLIKLKIEDSDTYICEVEDQKEEYOL 120
DB 61 ILGNQGSFLTKGSPSKLNDRAISRSLMDQGNFPLIKLKIEDSDTYICEVEDQKEEYOL 120
QY 121 LVFGLTANSDDLHLLQGGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDDLHLLQGGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWCTCTVLQOKKVEFKIDIVVLAFOKASSIVYKKEGOVEFSPPLAFVTEKLTGSGELMW 240
DB 181 TWCTCTVLQOKKVEFKIDIVVLAFOKASSIVYKKEGOVEFSPPLAFVTEKLTGSGELMW 240
QY 241 QAERASSSKSWITTFDLKNKEVSVKRVTPDKLQMGKRLPLHLTPQALPOYAG---SGNL 297
DB 217 -----PCSRSTSESTALGCLVADYFPEPVTVSMNSGALTSGVH 255
QY 298 TLALEAKTGKLEHOEYNLVVMRATOL-QKNLTCEVWGPTSPKMLSLKLENKAKVSKREK 356
DB 256 TEPVALQSSGLYSSLVTVPSNFGTQTYTCNV-----DHK 292
QY 357 PWMVLNPAAGMOCCLSDSGOVLLESNITKVLPTWSTPVEPKSCDKTHTCPCPAPELLGG 416
DB 293 P-----SNTKYVDKLT---VERKCCVE---CPCCPAP-VAG 320
QY 417 PSVFLFPPKPDITLMISRTPEVTCVVVDVSHEDPEVKFMVYDGEVNAKTKPREEOYN 476
DB 321 PSVFLFPPKPDITLMISRTPEVTCVVVDVSHEDPEVKFMVYDGEVNAKTKPREEOYN 380
QY 477 STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 536
DB 381 STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 440
QY 537 LTRKQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTPRVLDSDGFFFLYSKLTVDKSRW 596
DB 441 LTRKQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTPRVLDSDGFFFLYSKLTVDKSRW 500
QY 597 QGGNVFSCSVMHGALHNHYTOKSLSLSPG 625

Db 501 OQGNVFCSCVMHEALHNHYTQKSLSLSPG 529

RESULT 7
US-08-484-681-4

Sequence 4, Application US/08484681
Patent No. 6451313

GENERAL INFORMATION:

APPLICANT: Beaudry, Gary A.

APPLICANT: Maddon, Paul J.

TITLE OF INVENTION: CD4-GAMMA2 CD4-IGG2 CHIMERAS

NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESS:

ADDRESSEE: Cooper & Dunham LLP

STREET: 1185 Avenue of the Americas

CITY: New York

STATE: New York

COUNTRY: USA

ZIP: 10036

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.24

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/484,681

FILING DATE: 07-JUN-1995

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: White, John P.

REGISTRATION NUMBER: 28,678

REFERENCE/DOCKET NUMBER: 37690-II-B

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 278-0400

TELEFAX: (212) 391-0525

TELEX:

INFORMATION FOR SEQ ID NO: 4:

SEQUENCE CHARACTERISTICS:

LENGTH: 530 amino acids

STRANDEDNESS: unknown

TOPOLOGY: unknown

MOLECULE TYPE: CDNA

ORIGINAL SOURCE:

ORGANISM: homo sapien

CELL TYPE: lymphocyte

US-08-484-681-4

Query Match 63.0%; Score 2151; DB 4; Length 530;

Best Local Similarity 70.4%; Pred. No. 4,66-165;

Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

Db 1 MNRGVPFPHLLIVLLOLALIPATQGNKVVLLGKGTVELTCTAGSKSIQTHMKNQNOIK 60

Db 1 MNRGVPFPHLLIVLLOLALIPATQGNKVVLLGKGTVELTCTAGSKSIQTHMKNQNOIK 60

Db 1 ILNGGSPFLTKGSPKLNDRADSRSLMDQGNPFLIKLKTEDSTYICEVEDQKEEYQL 120

Db 1 ILNGGSPFLTKGSPKLNDRADSRSLMDQGNPFLIKLKTEDSTYICEVEDQKEEYQL 120

Db 121 LVFGLTANSDFHLTGOSITLTLLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180

Db 121 LVFGLTANSDFHLTGOSITLTLLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180

Db 121 LVFGLTANSDFHLTGOSITLTLLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180

Db 181 TWTCVTNLQOKKVEFKIDIVIAFAQKASSIYKKEGEBOVESFPPIAFTVEKLTGSGELMW 240

Db 181 TWTCVTNLQOKKVEFKIDIVIAFAQKASSIYKKEGEBOVESFPPIAFTVEKLTGSGELMW 240

Db 181 TWTCVTNLQOKKVEFKIDIVIAFAQKASSIYKKEGEBOVESFPPIAFTVEKLTGSGELMW 240

Db 241 QAERASSKSWITFLPKKKEVSVKRVTDQPKLQWKKLPKHLTLPGALPOYAG---SGNL 297

Db 241 QAERASSKSWITFLPKKKEVSVKRVTDQPKLQWKKLPKHLTLPGALPOYAG---SGNL 297

Db 217 -----PCSRSTSESTALGCLVADYFPEPVTVMNSGALTSGVH 255

Query Match 63.0%; Score 2151; DB 4; Length 530;

Best Local Similarity 70.4%; Pred. No. 4,66-165;

Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

Db 1 MNRGVPFPHLLIVLLOLALIPATQGNKVVLLGKGTVELTCTAGSKSIQTHMKNQNOIK 60

Db 1 MNRGVPFPHLLIVLLOLALIPATQGNKVVLLGKGTVELTCTAGSKSIQTHMKNQNOIK 60

Db 1 ILNGGSPFLTKGSPKLNDRADSRSLMDQGNPFLIKLKTEDSTYICEVEDQKEEYQL 120

Db 1 ILNGGSPFLTKGSPKLNDRADSRSLMDQGNPFLIKLKTEDSTYICEVEDQKEEYQL 120

Qy 298 TLALBAKTKLHDEVLVNRATQL-QKULICEVWGPTSPKMLSLKLENKAKVSRREK 356

Db 256 TFPVAVLQSSGLYSLSVTVTPSSNFGQTYTCNV-----DHK 292

Qy 357 PAVVLNPEAGMOCCLSDSQVLLSENIKVLPTMSTVPERKSCDKTKTCCPCAPPELLGG 416

Db 293 P-----SNTKYVDKT---VERKCCVE---CPCCAP-P-VAG 320

Qy 417 PSVFLPPKPKDITLMSRTPEVTCVVVDVSHEDPEVKFNKYVDGVENAKTKPREQYN 476

Db 321 PSVFLPPKPKDITLMSRTPEVTCVVVDVSHEDPEVQPMNYVDGVEVHNAKTKPREQFN 380

Qy 477 STYRVSVLTJVLQDWLNGEKYKCKVSNKALPAPIETKISKAKQPREPVYTLPPSRDE 536

Db 381 STFRVSVLTJVLQDWLNGEKYKCKVSNKALPAPIETKISKAKQPREPVYTLPPSRDE 440

Qy 537 LTRQVSLTCLVKGFGYSDDAVENESNGQENNYKTTTPVLDSDGSFFLYSKLTVDSRW 596

Db 441 MTKQVSLTCLVKGFGYSDDAVENESNGQENNYKTTTPVLDSDGSFFLYSKLTVDSRW 500

Qy 597 OQGNVFCSCVMHEALHNHYTQKSLSLSPG 625

Db 501 OQGNVFCSCVMHEALHNHYTQKSLSLSPG 529

RESULT 8

PCT-US93-07422-4

Sequence 4, Application PC/TUS9307422

GENERAL INFORMATION:

APPLICANT: Progenics Pharmaceuticals, Inc.

TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED

TITLE OF INVENTION: CD4-GAMMA2 AND CD4-IGG2 IMMUNOCONJUGATES, AND USES THEREOF

NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESS:

ADDRESSEE: Cooper & Dunham

STREET: 30 Rockefeller Plaza

CITY: New York

STATE: New York

COUNTRY: USA

ZIP: 10112

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: IBM PC compatible

SOFTWARE: Patentin Release #1.24

CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US93/07422

FILING DATE: 19930806

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/927,931

FILING DATE: 07-AUG-1992

ATTORNEY/AGENT INFORMATION:

NAME: White, John P.

REGISTRATION NUMBER: 28,678

REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPW/AJM

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 977-9550

TELEFAX: (212) 977-9803

TELEX: 422523 COOP UT

INFORMATION FOR SEQ ID NO: 4:

SEQUENCE CHARACTERISTICS:

LENGTH: 530 amino acids

TYPE: amino acid

STRANDEDNESS: unknown

TOPOLOGY: unknown

MOLECULE TYPE: CDNA

ORIGINAL SOURCE:

ORGANISM: homo sapien

CELL TYPE: lymphocyte

PCT-US93-07422-4

Query Match 63.0%; Score 2151; DB 5; Length 530;

Best Local Similarity 70.4%; Pred. No. 4,6e-165;
Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

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QY 1 MNRGVPFPHLLVLTOLALLPAATQGNKVVLGKGGDTVELTCTASQKSKIQFHHKNSNOIK 60
DB 1 MNRGVPFPHLLVLTOLALLPAATQGNKVVLGKGGDTVELTCTASQKSKIQFHHKNSNOIK 60
QY 61 ILGNQGSFLLTGGPSKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILGNQGSFLLTGGPSKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDDTHLLQGOSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDDTHLLQGOSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCTVLQOKKVEFKIDIVLAFQKASSIYKKEGEQVEFSPLAFYBEKLTGSGELMW 240
DB 181 TWTCTVLQOKKVEFKIDIVLAFQKASSIYKKEGEQVEFSPLAFYBEKLTGSGELMW 240
QY 241 QAERASSKSWITFDDLNKKEVSVKRVTOPKLOMGKKLPLHLTLPOALPOYAG---SGNL 297
DB 241 QAERASSKSWITFDDLNKKEVSVKRVTOPKLOMGKKLPLHLTLPOALPOYAG---SGNL 297
QY 298 TLALAKTGKLGHOEVLVVMRATOL-QKNLTCEVWGPTSPKMLSLKENKEAKVSKREK 356
DB 298 TLALAKTGKLGHOEVLVVMRATOL-QKNLTCEVWGPTSPKMLSLKENKEAKVSKREK 356
QY 357 PAVVNLPEAGMOCCLSDSGVLLBSNIVLPTWSTFVPEPKSCDKTHTCPCPAPBLLG 416
DB 357 PAVVNLPEAGMOCCLSDSGVLLBSNIVLPTWSTFVPEPKSCDKTHTCPCPAPBLLG 416
QY 417 PSVFLPPPKPOTLMTSRPEVTCVVVDVSHEDPEVKFMVYDGVVHNAKTPREQYN 476
DB 417 PSVFLPPPKPOTLMTSRPEVTCVVVDVSHEDPEVKFMVYDGVVHNAKTPREQYN 476
QY 477 STYRVVSVLTIVHODWLNKKEYKCKVSNKALPAPIEKTSKAKGQPREPOVYTLPPSRDE 536
DB 477 STYRVVSVLTIVHODWLNKKEYKCKVSNKALPAPIEKTSKAKGQPREPOVYTLPPSRDE 536
QY 537 LFTNQVSLTCLVKGFYPSDIAVWESNQPENNYKTTTPVLDSGFFLYSKLTVDKSNW 596
DB 537 LFTNQVSLTCLVKGFYPSDIAVWESNQPENNYKTTTPVLDSGFFLYSKLTVDKSNW 596
QY 597 QCGNVSFCSVMHEALHNHYTQKSLSLSPG 625
DB 597 QCGNVSFCSVMHEALHNHYTQKSLSLSPG 625

RESULT 9
US-08-477-460B-2
Sequence 2, Application US/08477460B
Patent No. 6034223
GENERAL INFORMATION:
APPLICANT: Progenics Pharmaceuticals, Inc.
TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
TITLE OF INVENTION: CD4-GAMMA2 AND CD4-19G2 IMMUNOCONJUGATES, AND USES THEREOF
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10112
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/477,460B
FILING DATE: 07-JUN-1995
CLASSIFICATION: 530
```

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/927,931
FILING DATE: 07-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPM/AJM
TELEPHONE: (212) 977-9550
TELEFAX: (212) 977-9809
TELEX: 422523 COOP UT
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte

US-08-477-460B-2
Query Match 60.8%; Score 2077; DB 3; Length 432;
Best Local Similarity 66.1%; Pred. No. 3.2e-159;
Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

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QY 1 MNRGVPFPHLLVLTOLALLPAATQGNKVVLGKGGDTVELTCTASQKSKIQFHHKNSNOIK 60
DB 1 MNRGVPFPHLLVLTOLALLPAATQGNKVVLGKGGDTVELTCTASQKSKIQFHHKNSNOIK 60
QY 61 ILGNQGSFLLTGGPSKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILGNQGSFLLTGGPSKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDDTHLLQGOSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDDTHLLQGOSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCTVLQOKKVEFKIDIVLAFQKASSIYKKEGEQVEFSPLAFYBEKLTGSGELMW 240
DB 181 TWTCTVLQOKKVEFKIDIVLAFQKASSIYKKEGEQVEFSPLAFYBEKLTGSGELMW 240
QY 241 QAERASSKSWITFDDLNKKEVSVKRVTOPKLOMGKKLPLHLTLPOALPOYAGSGLTLA 300
DB 241 QAERASSKSWITFDDLNKKEVSVKRVTOPKLOMGKKLPLHLTLPOALPOYAGSGLTLA 300
QY 301 LEAKTGKLGHOEVLVVMRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVW 360
DB 301 LEAKTGKLGHOEVLVVMRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVW 360
QY 361 INPEAGMOCCLSDSGVLLBSNIVLPTWSTFVPEPKSCDKTHTCPCPAPBLLGSPVF 420
DB 361 INPEAGMOCCLSDSGVLLBSNIVLPTWSTFVPEPKSCDKTHTCPCPAPBLLGSPVF 420
QY 421 LFPKPOTLMTSRPEVTCVVVDVSHEDPEVKFMVYDGVVHNAKTPREQYNSTYR 480
DB 421 LFPKPOTLMTSRPEVTCVVVDVSHEDPEVKFMVYDGVVHNAKTPREQYNSTYR 480
QY 481 VVSVLTIVHODWLNKKEYKCKVSNKALPAPIEKTSKAKGQPREPOVYTLPPSRDELTKN 540
DB 481 VVSVLTIVHODWLNKKEYKCKVSNKALPAPIEKTSKAKGQPREPOVYTLPPSRDELTKN 540
QY 541 QVSLTCLVKGFYPSDIAVWESNQPENNYKTTTPVLDSGFFLYSKLTVDKSNWQGN 600
DB 541 QVSLTCLVKGFYPSDIAVWESNQPENNYKTTTPVLDSGFFLYSKLTVDKSNWQGN 600
QY 601 VFSQVMEALHNHYTQKSLSLSPG 625
DB 601 VFSQVMEALHNHYTQKSLSLSPG 625
QY 625 VFSQVMEALHNHYTQKSLSLSPG 625
DB 625 VFSQVMEALHNHYTQKSLSLSPG 625

RESULT 10
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US-08-379-516-2
; Sequence 2, Application US/08379516
; Patent No. 6083478
; GENERAL INFORMATION:
; APPLICANT: Allaway, Graham P.
; APPLICANT: Madden, Paul J.
; TITLE OF INVENTION: No. 6083478-Repitidy1 Moiety-Conjugated CD4-Gamma2 and CD4-IgG2
; TITLE OF INVENTION: Immunconjugates and Uses Thereof
; FILE REFERENCE: 41215-A-PCT-US
; CURRENT APPLICATION NUMBER: US/08/379,516
; CURRENT FILING DATE: 1996-06-10
; EARLIER APPLICATION NUMBER: PCT/US93/07422
; EARLIER FILING DATE: 1993-08-06
; EARLIER APPLICATION NUMBER: 07/927,931
; EARLIER FILING DATE: 1992-08-07
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: Patent Ver. 2.1
; SEQ ID NO 2
; LENGTH: 432
; TYPE: PRT
; ORGANISM: Homo sapiens
US-08-379-516-2

Query Match 60.8%; Score 2077; DB 3; Length 432;
Best Local Similarity 66.1%; Pred. No. 3.2e-159;
Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

QY 1 MNRGVPFRHLILVQLALLPAATOGKRVYLGKGDVETLTCTASQKSIQPHMKNNOIK 60
DB 1 MNRGVPFRHLILVQLALLPAATOGKRVYLGKGDVETLTCTASQKSIQPHMKNNOIK 60
QY 61 ILNGGSFLLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILNGGSFLLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGITANSPTHLLOGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDG 180
DB 121 LVFGITANSPTHLLOGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDG 180
QY 181 TWCTCTVLONOKKVEFKIDIVVLAFAFKASSIYVKKGEQVESPFLAFTVEKLTGSGELMW 240
DB 181 TWCTCTVLONOKKVEFKIDIVVLAFAFKASSIYVKKGEQVESPFLAFTVEKLTGSGELMW 240
QY 241 QABRASSKSWITFDLKNKEVSVKRVTQDPKLQMGKKLPLHLTLPOALPOYAGSGLTLA 300
DB 241 QABRASSKSWITFDLKNKEVSVKRVTQDPKLQMGKKLPLHLTLPOALPOYAGSGLTLA 300
QY 207 -----
DB 207 -----
QY 361 LNPEAGMQLLSDSGOVLLEBSNIKVLPTWSTPVEPKSCDKHTGCPQAPPELLGSPSVF 420
DB 361 LNPEAGMQLLSDSGOVLLEBSNIKVLPTWSTPVEPKSCDKHTGCPQAPPELLGSPSVF 420
QY 207 -----KCCVE---CPPPARP-VAGPSVF 226
DB 207 -----KCCVE---CPPPARP-VAGPSVF 226
QY 421 LEPKPKDITLMSRTPEVTCVVVDVSHEDPEVKFMWYVDGVEVNAKTRPEEQYNSYR 480
DB 421 LEPKPKDITLMSRTPEVTCVVVDVSHEDPEVKFMWYVDGVEVNAKTRPEEQYNSYR 480
QY 227 LEPKPKDITLMSRTPEVTCVVVDVSHEDPEVKFMWYVDGVEVNAKTRPEEQYNSYR 286
DB 227 LEPKPKDITLMSRTPEVTCVVVDVSHEDPEVKFMWYVDGVEVNAKTRPEEQYNSYR 286
QY 481 VVSUTITVHOMLNGKEYKCKVSNKGLPAPIEKTISKTKGQPRREQVYTLTPPSREMTKN 540
DB 481 VVSUTITVHOMLNGKEYKCKVSNKGLPAPIEKTISKTKGQPRREQVYTLTPPSREMTKN 540
QY 541 QVSLTCLVKGAFYPSDIAVEMESNGQPENNYKTPPVLDSDGFFLYSKLTYDKSMOQGN 600
DB 541 QVSLTCLVKGAFYPSDIAVEMESNGQPENNYKTPPVLDSDGFFLYSKLTYDKSMOQGN 600
QY 347 QVSLTCLVKGAFYPSDIAVEMESNGQPENNYKTPPVLDSDGFFLYSKLTYDKSMOQGN 406
DB 347 QVSLTCLVKGAFYPSDIAVEMESNGQPENNYKTPPVLDSDGFFLYSKLTYDKSMOQGN 406
QY 601 VFSCVMEALHNHYTOKSLSPG 625
DB 601 VFSCVMEALHNHYTOKSLSPG 625
QY 407 VFSCVMEALHNHYTOKSLSPG 431
DB 407 VFSCVMEALHNHYTOKSLSPG 431

RESULT 11

US-09-329-916-2
; Sequence 2, Application US/09329916
; Patent No. 6177549
; GENERAL INFORMATION:
; APPLICANT: Progenics Pharmaceuticals, Inc.
; APPLICANT: Progenics Pharmaceuticals, Inc.
; TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
; TITLE OF INVENTION: CD4-GAMMA2 AND CD4-IgG2 IMMUNOCONJUGATES, AND USES THEREOF
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESS: Cooper & Dunham
; STREET: 30 Rockefeller Plaza
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10112
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.24
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/329,916
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/477,460
; FILING DATE: 07-JUN-1995
; APPLICATION NUMBER: US 07/927,931
; FILING DATE: 07-AUG-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPW/AJM
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 977-9550
; TELEFAX: (212) 977-9809
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 432 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: homo sapien
; CELL TYPE: lymphocyte
US-09-329-916-2

Query Match 60.8%; Score 2077; DB 3; Length 432;
Best Local Similarity 66.1%; Pred. No. 3.2e-159;
Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

QY 1 MNRGVPFRHLILVQLALLPAATOGKRVYLGKGDVETLTCTASQKSIQPHMKNNOIK 60
DB 1 MNRGVPFRHLILVQLALLPAATOGKRVYLGKGDVETLTCTASQKSIQPHMKNNOIK 60
QY 61 ILNGGSFLLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILNGGSFLLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGITANSPTHLLOGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDG 180
DB 121 LVFGITANSPTHLLOGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDG 180
QY 181 TWCTCTVLONOKKVEFKIDIVVLAFAFKASSIYVKKGEQVESPFLAFTVEKLTGSGELMW 240
DB 181 TWCTCTVLONOKKVEFKIDIVVLAFAFKASSIYVKKGEQVESPFLAFTVEKLTGSGELMW 240
QY 241 QABRASSKSWITFDLKNKEVSVKRVTQDPKLQMGKKLPLHLTLPOALPOYAGSGLTLA 300
DB 241 QABRASSKSWITFDLKNKEVSVKRVTQDPKLQMGKKLPLHLTLPOALPOYAGSGLTLA 300
QY 207 -----
DB 207 -----

QY 301 LEAKTGKLGHOEVLVVMRATOLQKNLTCVWGPSTPKMLSLKLENKAQVSKREKPVWV 360
 Db 207 ----- 206
 QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEPKSCDKTHTPPCPAPELLGPPSVF 420
 Db 207 -----KCCVE---CPCCPAP-VAGPSVF 226
 QY 421 LPPPKDPTLMSRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNAKTKPREQVNSTYR 480
 Db 227 LPPPKDPTLMSRTPEVTCVVVDVSHEDPEVQFNMYVDGVEVHNAKTKPREQVNSTYR 286
 QY 481 VVSVLTVLHODWLNKEKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKN 540
 Db 287 VVSVLTVVHODWLNKEKCKVSNKGLPAPIEKTISKAKGQPREPQVYTLPPSRDEMTKN 346
 QY 541 QVSLTCLVKGFPYSDIAVESNGQPENNYKTTPEVLDSGFFLYSKLTVDKSRMQGN 600
 Db 347 QVSLTCLVKGFPYSDIAVESNGQPENNYKTTPEVLDSGFFLYSKLTVDKSRMQGN 406
 QY 601 VFSCSVMEALHNHYTKSLSPG 625
 Db 407 VFSCSVMEALHNHYTKSLSPG 431

RESULT 12

US-08-485-372A-2

Sequence 2, Application US/08485372A

Patent No. 6187748

GENERAL INFORMATION:

APPLICANT: Beaudry, Gary A.

APPLICANT: Maddon, Paul J.

TITLE OF INVENTION: CD4-GAMMA2 CD4-IGG2 CHIMERAS

NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESS:

ADDRESSEE: Cooper & Dunham LLP

STREET: 1185 Avenue of the Americas

CITY: New York

STATE: New York

COUNTRY: USA

ZIP: 10036

COMPUTER READABLE FORM:

MEDIUM TYPE: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.24

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/485,372A

FILING DATE:

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/476,227

FILING DATE: 07-JUN-1995

ATTORNEY/AGENT INFORMATION:

NAME: White, John P.

REGISTRATION NUMBER: 28,678

REFERENCE/DOCKET NUMBER: 37690-II-A

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 278-0400

TELEFAX: (212) 391-0525

TELEX:

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 432 amino acids

TYPE: amino acid

STRANDEDNESS: unknown

TOPOLOGY: unknown

MOLECULE TYPE: protein

ORIGINAL SOURCE:

ORGANISM: homo sapien

CELL TYPE: lymphocyte

US-08-485-372A-2

Query Match 60.8%; Score 2077; DB 3; Length 432;
 Best Local Similarity 66.1%; Pred. No. 3,2e-159;
 Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

QY 1 NNRGVPFRHLVLVLOLALIPATQGNKYLGGKGTVEITCTASQKSIQFMKNNOIK 60
 Db 1 NNRGVPFRHLVLVLOLALIPATQGNKYLGGKGTVEITCTASQKSIQFMKNNOIK 60
 QY 61 ILGNQSFLLTKGSPSLNDRADRSRLMPQGNFPLIKNLKTEDSDTYICEVDQKEEYOL 120
 Db 61 ILGNQSFLLTKGSPSLNDRADRSRLMPQGNFPLIKNLKTEDSDTYICEVDQKEEYOL 120
 QY 121 LVFGTLTANSDBTLTGQSLTTLTLESPPGSSPSVQCRSPRGKNIQGGAKTSLVSQLELDQSG 180
 Db 121 LVFGTLTANSDBTLTGQSLTTLTLESPPGSSPSVQCRSPRGKNIQGGAKTSLVSQLELDQSG 180
 QY 181 TWTCTVLQNKKEVERKIDIVLAFQKASSIVYKKEGEQVEFSFLAFTVEKLTGSGELMW 240
 Db 181 TWTCTVLQNKKEVERKIDIVLAFER-----KCCVE---CPCCPAP-VAGPSVF 206
 QY 241 QAEBSASSSWITTFPLKXKVESVKRVTDPKLQMKKLPIHLTLPOALPOYAGSGNLTLA 300
 Db 207 ----- 206
 QY 301 LEAKTGKLGHOEVLVVMRATOLQKNLTCVWGPSTPKMLSLKLENKAQVSKREKPVWV 360
 Db 207 ----- 206
 QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEPKSCDKTHTPPCPAPELLGPPSVF 420
 Db 207 -----KCCVE---CPCCPAP-VAGPSVF 226
 QY 421 LPPPKDPTLMSRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNAKTKPREQVNSTYR 480
 Db 227 LPPPKDPTLMSRTPEVTCVVVDVSHEDPEVQFNMYVDGVEVHNAKTKPREQVNSTYR 286
 QY 481 VVSVLTVLHODWLNKEKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKN 540
 Db 287 VVSVLTVVHODWLNKEKCKVSNKGLPAPIEKTISKAKGQPREPQVYTLPPSRDEMTKN 346
 QY 541 QVSLTCLVKGFPYSDIAVESNGQPENNYKTTPEVLDSGFFLYSKLTVDKSRMQGN 600
 Db 347 QVSLTCLVKGFPYSDIAVESNGQPENNYKTTPEVLDSGFFLYSKLTVDKSRMQGN 406
 QY 601 VFSCSVMEALHNHYTKSLSPG 625
 Db 407 VFSCSVMEALHNHYTKSLSPG 431

RESULT 13

US-09-409-006A-2

Sequence 2, Application US/09409006A

Patent No. 6342586

GENERAL INFORMATION:

APPLICANT: Progenics Pharmaceuticals, Inc.

TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED

NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESS:

ADDRESSEE: Cooper & Dunham

STREET: 30 Rockefeller Plaza

CITY: New York

STATE: New York

COUNTRY: USA

ZIP: 10112

COMPUTER READABLE FORM:

MEDIUM TYPE: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.24

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/409,006A

FILING DATE: 29-SEP-1999

```

CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/927,931
FILING DATE: 07-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPM/AJM
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 977-9550
TELEFAX: (212) 977-9809
TELEX: 422523 COOP UI
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-09-409-006A-2

```

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Query Match      60.8%; Score 2077; DB 4; Length 432;
Best Local Similarity 66.1%; Pred. No. 3,2e-159;
Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

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QY 1 MNRGVPFRHLLLVQLALPPATQGNKVLGKKGDTVELTCTASQKSIQPHMKNNOIK 60
DB 1 MNRGVPFRHLLLVQLALPPATQGNKVLGKKGDTVELTCTASQKSIQPHMKNNOIK 60
QY 61 ILNGQSFLLTGKPSKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILNGQSFLLTGKPSKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDTHLLQGSLLTTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLLQGSLLTTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 121 LVFGLTANSDTHLLQGSLLTTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLLQGSLLTTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVTLQNKQKVEFKIDIVLAFQKASSIVYKKEGEOVERSFPLAFVEXLTGSGELMW 240
DB 181 TWTCVTLQNKQKVEFKIDIVLAFQKASSIVYKKEGEOVERSFPLAFVEXLTGSGELMW 240
QY 181 TWTCVTLQNKQKVEFKIDIVLAFQKASSIVYKKEGEOVERSFPLAFVEXLTGSGELMW 240
DB 181 TWTCVTLQNKQKVEFKIDIVLAFQKASSIVYKKEGEOVERSFPLAFVEXLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVOTDPKLQMGKLLPLHLTPQALPOYAGSGNLTIA 300
DB 207 ----- 206
QY 301 LEAKTGKLGQEVNLVWMRATQLOKNLTCEVWGPTSPKLMLSIKLENKAKVSKREKPVWV 360
DB 207 ----- 206
QY 361 LNPEAGMMQCLSDSGQVILBSNIVLPTWSTPVEPKSGCDKTHTPPCPAPBELLGSPSVF 420
DB 207 -----KCCVE---CPCPAPB-VAGSPSVF 226
QY 421 LPPPKDITLMSRTPEVTCVVDVSHEDPEYKFMVYDGVENVNAKTKPREEOQNSIYR 480
DB 227 LPPPKDITLMSRTPEVTCVVDVSHEDPEYKFMVYDGVENVNAKTKPREEOQNSIYR 286
QY 481 VVSVLTVLHODMLNGEKYKCVSNKALPAPIEKTSKAKGQPREDOYVTLTPPSRDELTKN 540
DB 287 VVSVLTVLHODMLNGEKYKCVSNKALPAPIEKTSKAKGQPREDOYVTLTPPSRDELTKN 346
QY 541 QVSLTCLVKGFPSPDIAMWESNGQPENNYKTTTPVULSDSGFLLYSKLTVDKSWQGN 600
DB 347 QVSLTCLVKGFPSPDIAMWESNGQPENNYKTTTPVULSDSGFLLYSKLTVDKSWQGN 406
QY 601 VFGCSVMHEALHNHTQKSLSPG 625
DB 407 VFGCSVMHEALHNHTQKSLSPG 431

```

```

RESULT 14
US-08-484-681-2
Sequence 2, Application US/08484681
Patent No. 6451313
GENERAL INFORMATION:
APPLICANT: Beaudry, Gary A.
APPLICANT: Maddon, Paul J.
TITLE OF INVENTION: CD4-GAMMA2 CD4-19G2 CHIMERAS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSER: Cooper & Dunham LLP
STREET: 1185 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/484,681
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 37690-II-B
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 278-0400
TELEFAX: (212) 391-0525
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-08-484-681-2

```

```

Query Match      60.8%; Score 2077; DB 4; Length 432;
Best Local Similarity 66.1%; Pred. No. 3,2e-159;
Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

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QY 1 MNRGVPFRHLLLVQLALPPATQGNKVLGKKGDTVELTCTASQKSIQPHMKNNOIK 60
DB 1 MNRGVPFRHLLLVQLALPPATQGNKVLGKKGDTVELTCTASQKSIQPHMKNNOIK 60
QY 61 ILNGQSFLLTGKPSKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILNGQSFLLTGKPSKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDTHLLQGSLLTTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLLQGSLLTTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVTLQNKQKVEFKIDIVLAFQKASSIVYKKEGEOVERSFPLAFVEXLTGSGELMW 240
DB 181 TWTCVTLQNKQKVEFKIDIVLAFQKASSIVYKKEGEOVERSFPLAFVEXLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVOTDPKLQMGKLLPLHLTPQALPOYAGSGNLTIA 300
DB 207 ----- 206
QY 301 LEAKTGKLGQEVNLVWMRATQLOKNLTCEVWGPTSPKLMLSIKLENKAKVSKREKPVWV 360
DB 207 ----- 206

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QY 361 LNPEAGMOCCLSDSGVLLBSNLIKVLPTWSTPVEPKSCDKTHTCPCPAPELLGSPSVF 420
DB 207 -----KCCVE---CPPCAPAP-VAGPSVF 226
QY 421 LPPPKDXTLMSRPEVTCVVDVSHEDPEYKFNMYVDGVEVHNAKTPREEOYNSTYR 480
DB 227 LPPPKDXTLMSRPEVTCVVDVSHEDPEYKFNMYVDGVEVHNAKTPREEOYNSTYR 286
QY 481 VVSVLTVLVHODMLNGEYKCVSNKALPAPIEKTISKAGOPREPOVYTLPPSRDELTKN 540
DB 287 VVSVLTVLVHODMLNGEYKCVSNKALPAPIEKTISKAGOPREPOVYTLPPSRDELTKN 346
QY 541 QVSLTCLVKGFPSPDIIVAVEMESNGOPENNYYKTPPVLDSDGSFFLYSKLTVDKSRMOQGN 600
DB 347 QVSLTCLVKGFPSPDIIVAVEMESNGOPENNYYKTPPVLDSDGSFFLYSKLTVDKSRMOQGN 406
QY 601 VFSCSVMEHALNHNTOKSLSLSPG 625
DB 407 VFSCSVMEHALNHNTOKSLSLSPG 431

RESULT 15

PCT-US93-07422-2
Sequence 2, Application PC/TUS9307422
GENERAL INFORMATION:
APPLICANT: Progenice Pharmaceuticals, Inc.
TITLE OF INVENTION: NON-PEPTIDIC MOIETY-CONJUGATED
TITLE OF INVENTION: CD4-GAMMA2 AND CD4-IGG2 IMMUNOCONJUGATES, AND USES THEREOF
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Cooper & Dunham
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10112
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/07422
FILING DATE: 19930806
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/927,931
FILING DATE: 07-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPW/AJM
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 977-9550
TELEFAX: (212) 977-9809
TELEX: 422523 COOP UI
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
PCT-US93-07422-2

QY Query Match 60.8%; Score 2077; DB 5; Length 432;
Best Local Similarity 66.1%; Pctd. No. 3, 2e-159;
Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;
QY 1 NMRGVFPRHLLVLQALLPAATQGNKVVLGKKGDTVELTCTASQKSIQFMHKNQIX 60

DB 1 NMRGVFPRHLLVLQALLPAATQGNKVVLGKKGDTVELTCTASQKSIQFMHKNQIX 60
QY 61 ILNGSGFLTKGSPSLNDRADSRRLMDQGNPPLIKLTKIEDSTTYICEVEDQEEYQL 120
DB 61 ILNGSGFLTKGSPSLNDRADSRRLMDQGNPPLIKLTKIEDSTTYICEVEDQEEYQL 120
QY 121 LVFGLTANSDDTLTGOSLTLTLFSPPGSSPSVOCSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDDTLTGOSLTLTLFSPPGSSPSVOCSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWCTVLOKQKVEPKIDIVLAFQKASSIYKKEGOVPSPLAFTVEKLTGSGELMW 240
DB 181 TWCTVLOKQKVEPKIDIVLAFER----- 206
QY 241 QAEKASSKSWITFDLKNKEVSVKRVYODPKLQMGKLPMLTLPLQALPOYAGSGNLTLA 300
DB 207 ----- 206
QY 301 LEAKTGKLHGEVNLVVRATOLQKVLTCVWGPTSPKMLSLKLENKEAKVSKREKPYWV 360
DB 207 ----- 206
QY 361 LNPEAGMOCCLSDSGVLLBSNLIKVLPTWSTPVEPKSCDKTHTCPCPAPELLGSPSVF 420
DB 207 -----KCCVE---CPPCAPAP-VAGPSVF 226
QY 421 LPPPKDXTLMSRPEVTCVVDVSHEDPEYKFNMYVDGVEVHNAKTPREEOYNSTYR 480
DB 227 LPPPKDXTLMSRPEVTCVVDVSHEDPEYKFNMYVDGVEVHNAKTPREEOYNSTYR 286
QY 481 VVSVLTVLVHODMLNGEYKCVSNKALPAPIEKTISKAGOPREPOVYTLPPSRDELTKN 540
DB 287 VVSVLTVLVHODMLNGEYKCVSNKALPAPIEKTISKAGOPREPOVYTLPPSRDELTKN 346
QY 541 QVSLTCLVKGFPSPDIIVAVEMESNGOPENNYYKTPPVLDSDGSFFLYSKLTVDKSRMOQGN 600
DB 347 QVSLTCLVKGFPSPDIIVAVEMESNGOPENNYYKTPPVLDSDGSFFLYSKLTVDKSRMOQGN 406
QY 601 VFSCSVMEHALNHNTOKSLSLSPG 625
DB 407 VFSCSVMEHALNHNTOKSLSLSPG 431

RESULT 16

US-08-417-495-6
Sequence 6, Application US/08417495
Patent No. 5843728
GENERAL INFORMATION:
APPLICANT: Seed, Brian et al.
TITLE OF INVENTION: Redirection of Cellular Immunity by Chimeras
TITLE OF INVENTION: Receptor
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 55SX
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: WordPerfect (Version 5.0)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/417,495
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/203,866
FILING DATE:
APPLICATION NUMBER: US/07/847,566

FILING DATE:
APPLICATION NUMBER: 07/665,961
FILING DATE: March 7, 1991
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/119002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 532 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-417-495-6

Query March 59.7%; Score 2039; DB 2; Length 532;
Best Local Similarity 99.0%; Pred. No. 5e-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVPFRHLLVLTQALLPAPATQGNKVVLGKGGDTVELTCTASQKSIQFHMKNQIK 60
DB 1 MNRGVPFRHLLVLTQALLPAPATQGNKVVLGKGGDTVELTCTASQKSIQFHMKNQIK 60
QY 61 ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIKNKIEDSDTYICEVEDQKEEYOL 120
DB 61 ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIKNKIEDSDTYICEVEDQKEEYOL 120
QY 121 LVFGLTANSDTHLQGGSLTLTLESPPGSSPSVOCRSRPGKNIOGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDTHLQGGSLTLTLESPPGSSPSVOCRSRPGKNIOGGKTLVSQLELQDSG 180
QY 181 TWCTCTVLQNKQKVEFKIDIVVLAFOKASSIYKKKEGQVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWCTCTVLQNKQKVEFKIDIVVLAFOKASSIYKKKEGQVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPRKIQMGKPLPHLTLPQALPOYAGSGLTTLA 300
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDPRKIQMGKPLPHLTLPQALPOYAGSGLTTLA 300
QY 301 LEAKTGKHOEVNLVVMRATQLOKNTLCEVMGPTSPKLMSTKLKNEAKYSKKEKPYVW 360
DB 301 LEAKTGKHOEVNLVVMRATQLOKNTLCEVMGPTSPKLMSTKLKNEAKYSKKEKPYVW 360
QY 361 LNPEAGMWQCLLSDSGVLLSESNIKVLPWTSTPVHADPKLC 399
DB 361 LNPEAGMWQCLLSDSGVLLSESNIKVLPWTSTPVHADPKLC 401

RESULT 17
US-08-284-391B-6
Sequence 6, Application US/08284391B
Patent No. 5851828

GENERAL INFORMATION:
APPLICANT: Seed, Brian
APPLICANT: Banapour, Babak
APPLICANT: Romeo, Charles
APPLICANT: Kolanus, Waldemar
TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
TITLE OF INVENTION: CELLS BY CHIMERIC CD4 RECEPTOR- BEARING CELLS
NUMBER OF SEQUENCES: 53
CORRESPONDENCE ADDRESS:
ADDRESSEE: Clark & Elbing LLP
STREET: 176 Federal Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110
COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/284,391B
FILING DATE: 02-AUG-1994
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/195,395
FILING DATE: 14-FEB-1994
APPLICATION NUMBER: 07/847,566
FILING DATE: 06-MAR-1992
APPLICATION NUMBER: 07/665,961
FILING DATE: 07-MAR-1991
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L.
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/247001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045
TELEX:

INFORMATION FOR SEQ ID NO: 6:

SEQUENCE CHARACTERISTICS:
LENGTH: 532 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-284-391B-6

Query March 59.7%; Score 2039; DB 2; Length 532;
Best Local Similarity 99.0%; Pred. No. 5e-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVPFRHLLVLTQALLPAPATQGNKVVLGKGGDTVELTCTASQKSIQFHMKNQIK 60
DB 1 MNRGVPFRHLLVLTQALLPAPATQGNKVVLGKGGDTVELTCTASQKSIQFHMKNQIK 60
QY 61 ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIKNKIEDSDTYICEVEDQKEEYOL 120
DB 61 ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIKNKIEDSDTYICEVEDQKEEYOL 120
QY 121 LVFGLTANSDTHLQGGSLTLTLESPPGSSPSVOCRSRPGKNIOGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDTHLQGGSLTLTLESPPGSSPSVOCRSRPGKNIOGGKTLVSQLELQDSG 180
QY 181 TWCTCTVLQNKQKVEFKIDIVVLAFOKASSIYKKKEGQVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWCTCTVLQNKQKVEFKIDIVVLAFOKASSIYKKKEGQVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPRKIQMGKPLPHLTLPQALPOYAGSGLTTLA 300
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDPRKIQMGKPLPHLTLPQALPOYAGSGLTTLA 300
QY 301 LEAKTGKHOEVNLVVMRATQLOKNTLCEVMGPTSPKLMSTKLKNEAKYSKKEKPYVW 360
DB 301 LEAKTGKHOEVNLVVMRATQLOKNTLCEVMGPTSPKLMSTKLKNEAKYSKKEKPYVW 360
QY 361 LNPEAGMWQCLLSDSGVLLSESNIKVLPWTSTPVHADPKLC 399
DB 361 LNPEAGMWQCLLSDSGVLLSESNIKVLPWTSTPVHADPKLC 401

RESULT 18
US-09-218-950-6
Sequence 6, Application US/09218950
Patent No. 6284240

GENERAL INFORMATION:
APPLICANT: Seed, Brian
APPLICANT: Banapour, Babak
APPLICANT: Romeo, Charles

```

/ APPLICANT: Kojanus, Waldemar
/ TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
/ TITLE OF INVENTION: CELLS BY CHIMERIC CD4 RECEPTOR- BEARING CELLS
/ NUMBER OF SEQUENCES: 53
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Clark & Elbing LLP
/ STREET: 176 Federal Street
/ CITY: Boston
/ STATE: MA
/ COUNTRY: USA
/ ZIP: 02110
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Diskette
/ COMPUTER: IBM Compatible
/ OPERATING SYSTEM: DOS
/ SOFTWARE: FASTSEQ for windows Version 2.0
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/218,950
/ FILING DATE:
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US/08/284,391
/ FILING DATE: 02-AUG-1994
/ APPLICATION NUMBER: 08/195,395
/ FILING DATE: 14-FEB-1994
/ APPLICATION NUMBER: 07/847,566
/ FILING DATE: 06-MAR-1992
/ APPLICATION NUMBER: 07/665,961
/ FILING DATE: 07-MAR-1991
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Elbing, Karen L.
/ REGISTRATION NUMBER: 35,238
/ REFERENCE/DOCKET NUMBER: 00786/247001
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 617-428-0200
/ TELEFAX: 617-428-7045
/ TELEX:
/ INFORMATION FOR SEQ ID NO: 6:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 532 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ US-09-218-950-6

Query Match      59.7%; Score 2039; DB 3; Length 532;
Best Local Similarity 99.0%; Pred. No. 5e-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY      1 NNRGVFPRHLLVLDLALLPAATQGNKVVLGKKGDVLELTCTASQKKSIOFHMKNNOIK 60
DB      1 NNRGVFPRHLLVLDLALLPAATQGNKVVLGKKGDVLELTCTASQKKSIOFHMKNNOIK 60
QY      61 ILGNQSFLLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQEEVQL 120
DB      61 ILGNQSFLLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQEEVQL 120
QY      121 LVFGLTANSDDTHLLQGSLLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB      121 LVFGLTANSDDTHLLQGSLLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY      122 LVFGLTANSDDTHLLQGSLLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB      122 LVFGLTANSDDTHLLQGSLLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY      181 TWTCTVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
DB      181 TWTCTVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
QY      241 QAEARASSKSWITFDLKNKEVSVKRVTDQPKLQMGKLLPLHLTLPOALPOYAGSGNLTLA 300
DB      241 QAEARASSKSWITFDLKNKEVSVKRVTDQPKLQMGKLLPLHLTLPOALPOYAGSGNLTLA 300
QY      301 LEAKTGKLEHGVNLVVMRATOLQKNLTCEVWGPTSPKMLSLTENKEAKVSKREKPVNV 360
DB      301 LEAKTGKLEHGVNLVVMRATOLQKNLTCEVWGPTSPKMLSLTENKEAKVSKREKPVNV 360
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QY      361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--BEKSC 399
DB      361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADKLC 401

RESULT 19
PCT-US92-01785-6
/ Sequence 6, Application PC/TUS9201785
/ GENERAL INFORMATION:
/ APPLICANT: The General Hospital Corporation
/ TITLE OF INVENTION: Redirection of Cellular Immunity by Receptor
/ NUMBER OF SEQUENCES: 27
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Fish & Richardson
/ STREET: 225 Franklin Street
/ CITY: Boston
/ STATE: MA
/ COUNTRY: USA
/ ZIP: 02110-2804
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
/ COMPUTER: IBM PS/2 Model 502 or 55SX
/ OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
/ SOFTWARE: Wordperfect (Version 5.0)
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: PCT/US92/01785
/ FILING DATE: 19920306
/ CLASSIFICATION: 530
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 07/665,961
/ FILING DATE: March 7, 1991
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Clark, Paul T.
/ REGISTRATION NUMBER: 30,162
/ REFERENCE/DOCKET NUMBER: 00786/119002
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (617) 542-5070
/ TELEFAX: (617) 542-8906
/ TELEX: 200154
/ INFORMATION FOR SEQ ID NO: 6:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 532 amino acids
/ TYPE: AMINO ACID
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ PCT-US92-01785-6

Query Match      59.7%; Score 2039; DB 5; Length 532;
Best Local Similarity 99.0%; Pred. No. 5e-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY      1 NNRGVFPRHLLVLDLALLPAATQGNKVVLGKKGDVLELTCTASQKKSIOFHMKNNOIK 60
DB      1 NNRGVFPRHLLVLDLALLPAATQGNKVVLGKKGDVLELTCTASQKKSIOFHMKNNOIK 60
QY      61 ILGNQSFLLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQEEVQL 120
DB      61 ILGNQSFLLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQEEVQL 120
QY      121 LVFGLTANSDDTHLLQGSLLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB      121 LVFGLTANSDDTHLLQGSLLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY      181 TWTCTVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
DB      181 TWTCTVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
QY      241 QAEARASSKSWITFDLKNKEVSVKRVTDQPKLQMGKLLPLHLTLPOALPOYAGSGNLTLA 300
DB      241 QAEARASSKSWITFDLKNKEVSVKRVTDQPKLQMGKLLPLHLTLPOALPOYAGSGNLTLA 300
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QY 301 LEAKTGKHOEVNLYVMRATQLOKNLTCEVWGPTSPKLMLSIKLENKAKVSKREKPVW 360
DB 301 LEAKTGKHOEVNLYVMRATQLOKNLTCEVWGPTSPKLMLSIKLENKAKVSKREKPVW 360
QY 361 LNPEAGMWOCILSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMWOCILSDSGOVLLESNIKVLPTWSTPVHADPKLC 401

RESULT 20

PCT-US95-00454-6
Sequence 6, Application PC/TUS9500454
GENERAL INFORMATION:
APPLICANT: Seed, Brian et al.
TITLE OF INVENTION: Targeted Cytolysis of HIV-Infected
TITLE OF INVENTION: Cells by Chimeric CD4 Receptor-
TITLE OF INVENTION: Bearing Cells
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 55SX
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: Wordperfect (Version 5.0)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/00454
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/847,566
FILING DATE: March 6, 1992
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/665,961
FILING DATE: March 7, 1991
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/247001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 532 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
PCT-US95-00454-6

Query Match 59.7%; Score 2039; DB 5; Length 532;

Best Local Similarity 99.0%; Pred. No. 56-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVFPHLLLVLTALLPATQGNKVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
DB 1 MNRGVFPHLLLVLTALLPATQGNKVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
QY 61 ILNGSFLTKGSPSLNDRADSRSLWDQGNFPLIKNLIKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILNGSFLTKGSPSLNDRADSRSLWDQGNFPLIKNLIKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGITANSPTHTLLOGOSLTTLTLESPGSSPSVQCRSPRGKNIQCGKTLVSQLELDSG 180
DB 121 LVFGITANSPTHTLLOGOSLTTLTLESPGSSPSVQCRSPRGKNIQCGKTLVSQLELDSG 180

QY 181 TWICTVLQONKQVFEKIDIVLAFQKASSIVYKKEGQVFEFPLAFTVEKLTGSGELMW 240
DB 181 TWICTVLQONKQVFEKIDIVLAFQKASSIVYKKEGQVFEFPLAFTVEKLTGSGELMW 240
QY 241 QAEPASSSKSMITFDLKNKEVSVKRVTDPPLOMGKKLPHLTLPOLPOYAGSGLTLA 300
DB 241 QAEPASSSKSMITFDLKNKEVSVKRVTDPPLOMGKKLPHLTLPOLPOYAGSGLTLA 300
QY 301 LEAKTGKHOEVNLYVMRATQLOKNLTCEVWGPTSPKLMLSIKLENKAKVSKREKPVW 360
DB 301 LEAKTGKHOEVNLYVMRATQLOKNLTCEVWGPTSPKLMLSIKLENKAKVSKREKPVW 360
QY 361 LNPEAGMWOCILSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMWOCILSDSGOVLLESNIKVLPTWSTPVHADPKLC 401

RESULT 21

US-08-417-495-4
Sequence 4, Application US/08417495
Patent No. 5843728
GENERAL INFORMATION:
APPLICANT: Seed, Brian et al.
TITLE OF INVENTION: Redirection of Cellular Immunity by
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 55SX
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: Wordperfect (Version 5.0)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/417,495
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/203,866
FILING DATE:
APPLICATION NUMBER: US/07/847,566
FILING DATE:
APPLICATION NUMBER: 07/665,961
FILING DATE: March 7, 1991
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/119002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 575 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-417-495-4

Query Match 59.7%; Score 2039; DB 2; Length 575;

Best Local Similarity 99.0%; Pred. No. 56-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVFPHLLLVLTALLPATQGNKVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
DB 1 MNRGVFPHLLLVLTALLPATQGNKVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60

Db 1 MNRGVFRRLLVLQALLPAATQGNKVVLGKKDVTVELTCTASQKKSIOFHMKNSNOIK 60
Qy 61 ILGNQGSFLTKGSPSKLNDPADSRSLMDQGNPPLIKNLKIEDSDTYICEVEDQKEEYOL 120
Db 61 ILGNQGSFLTKGSPSKLNDPADSRSLMDQGNPPLIKNLKIEDSDTYICEVEDQKEEYOL 120
Qy 121 LVFGLTANSDFHLLOGQSLTLTLESPPGSSPSVOCSPRGKNIQGGKTLVSQLELDQSG 180
Db 121 LVFGLTANSDFHLLOGQSLTLTLESPPGSSPSVOCSPRGKNIQGGKTLVSQLELDQSG 180
Qy 181 TWCTVQLNQKKVEFKIDIVLAFOKASSIYKKEGEQVEFSPPLAFTVEKLTGSGELMW 240
Db 181 TWCTVQLNQKKVEFKIDIVLAFOKASSIYKKEGEQVEFSPPLAFTVEKLTGSGELMW 240
Qy 241 QAERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
Db 241 QAERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
Qy 301 LEAKTGKLEHOEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPYVW 360
Db 301 LEAKTGKLEHOEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPYVW 360
Qy 361 INPEAGMOCCLSDSGQVLLSNNIKVLPWTSTPV--EPKSC 399
Db 361 INPEAGMOCCLSDSGQVLLSNNIKVLPWTSTPVHADPKLC 401

RESULT 22
US-08-284-391B-4
Sequence 4, Application US/08284391B
Patent No. 5851828
GENERAL INFORMATION:
APPLICANT: Seed, Brian
APPLICANT: Banapour, Babak
APPLICANT: Romeo, Charles
APPLICANT: Kolanus, Waldemar
TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
NUMBER OF INVENTION: CELLS BY CHIMERIC CD4 RECEPTOR-BEARING CELLS
CORRESPONDENCE ADDRESS:
ADDRESSEE: Clark & Elbing LLP
STREET: 176 Federal Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/284,391B
FILING DATE: 02-AUG-1994
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/195,395
FILING DATE: 14-FEB-1994
APPLICATION NUMBER: 07/847,566
FILING DATE: 06-MAR-1992
APPLICATION NUMBER: 07/665,961
FILING DATE: 07-MAR-1991
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L.
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/247001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045
TELEX:
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 575 amino acids

TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-284-391B-4

Query Match
Best Local Similarity 99.0%; Pred. No. 5-6e-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

Qy 1 MNRGVFRRLLVLQALLPAATQGNKVVLGKKDVTVELTCTASQKKSIOFHMKNSNOIK 60
Db 1 MNRGVFRRLLVLQALLPAATQGNKVVLGKKDVTVELTCTASQKKSIOFHMKNSNOIK 60
Qy 61 ILGNQGSFLTKGSPSKLNDPADSRSLMDQGNPPLIKNLKIEDSDTYICEVEDQKEEYOL 120
Db 61 ILGNQGSFLTKGSPSKLNDPADSRSLMDQGNPPLIKNLKIEDSDTYICEVEDQKEEYOL 120
Qy 121 LVFGLTANSDFHLLOGQSLTLTLESPPGSSPSVOCSPRGKNIQGGKTLVSQLELDQSG 180
Db 121 LVFGLTANSDFHLLOGQSLTLTLESPPGSSPSVOCSPRGKNIQGGKTLVSQLELDQSG 180
Qy 181 TWCTVQLNQKKVEFKIDIVLAFOKASSIYKKEGEQVEFSPPLAFTVEKLTGSGELMW 240
Db 181 TWCTVQLNQKKVEFKIDIVLAFOKASSIYKKEGEQVEFSPPLAFTVEKLTGSGELMW 240
Qy 241 QAERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
Db 241 QAERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
Qy 301 LEAKTGKLEHOEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPYVW 360
Db 301 LEAKTGKLEHOEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPYVW 360
Qy 361 INPEAGMOCCLSDSGQVLLSNNIKVLPWTSTPV--EPKSC 399
Db 361 INPEAGMOCCLSDSGQVLLSNNIKVLPWTSTPVHADPKLC 401

RESULT 23
US-09-218-950-4
Sequence 4, Application US/09218950
Patent No. 6284240
GENERAL INFORMATION:
APPLICANT: Seed, Brian
APPLICANT: Banapour, Babak
APPLICANT: Romeo, Charles
APPLICANT: Kolanus, Waldemar
TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
NUMBER OF INVENTION: CELLS BY CHIMERIC CD4 RECEPTOR-BEARING CELLS
CORRESPONDENCE ADDRESS:
ADDRESSEE: Clark & Elbing LLP
STREET: 176 Federal Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/218,950
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/284,391
FILING DATE: 02-AUG-1994
APPLICATION NUMBER: 08/195,395
FILING DATE: 14-FEB-1994
APPLICATION NUMBER: 07/847,566

FILING DATE: 06-MAR-1992
APPLICATION NUMBER: 07/665,961
FILING DATE: 07-MAR-1991
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L.
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/247001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045
TELEX:
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 575 amino acids
TYPE: amino acid
SPRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-218-950-4

Query Match 59.7%; Score 2039; DB 3; Length 575;
Best Local Similarity 99.0%; Pred. No. 5,66-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVPFRHLVLVQLALPPAATQGNKVLGKKGDVETLCTASQKSIOPHMKNNOIK 60
DB 1 MNRGVPFRHLVLVQLALPPAATQGNKVLGKKGDVETLCTASQKSIOPHMKNNOIK 60
QY 61 ILNGSGSFLTKGSPKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILNGSGSFLTKGSPKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSSTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSSTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVTLQONKKVEFKIDIVLAFQKASSIYKKEGEOVESFPLAFTVEKLTGSGELMW 240
DB 181 TWTCVTLQONKKVEFKIDIVLAFQKASSIYKKEGEOVESFPLAFTVEKLTGSGELMW 240
QY 241 QAEARSSSKSWITFDLNKKEVSVKRVTDPRLOQKGLPHLTLPOALPOYAGSGNLTIA 300
DB 241 QAEARSSSKSWITFDLNKKEVSVKRVTDPRLOQKGLPHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKLGHOEVNLVVMRATOLQKNLTCCEVWGPTSPKLMSTLKENKAKVSKREKPYW 360
DB 301 LEAKTGKLGHOEVNLVVMRATOLQKNLTCCEVWGPTSPKLMSTLKENKAKVSKREKPYW 360
QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401

RESULT 24
PCT-US92-01785-4

Sequence 4, Application PC/TUS9201785
GENERAL INFORMATION:
APPLICANT: The General Hospital Corporation
TITLE OF INVENTION: Redirection of Cellular Immunity by Receptor
TITLE OF INVENTION: Chimeras
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 55SX
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: Wordperfect (Version 5.0)

CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/01785
FILING DATE: 19920306
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/665,961
FILING DATE: March 7, 1991
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/119002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 575 amino acids
TYPE: AMINO ACID
TOPOLOGY: linear
MOLECULE TYPE: protein
PCT-US92-01785-4

Query Match 59.7%; Score 2039; DB 5; Length 575;
Best Local Similarity 99.0%; Pred. No. 5,66-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVPFRHLVLVQLALPPAATQGNKVLGKKGDVETLCTASQKSIOPHMKNNOIK 60
DB 1 MNRGVPFRHLVLVQLALPPAATQGNKVLGKKGDVETLCTASQKSIOPHMKNNOIK 60
QY 61 ILNGSGSFLTKGSPKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILNGSGSFLTKGSPKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSSTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSSTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVTLQONKKVEFKIDIVLAFQKASSIYKKEGEOVESFPLAFTVEKLTGSGELMW 240
DB 181 TWTCVTLQONKKVEFKIDIVLAFQKASSIYKKEGEOVESFPLAFTVEKLTGSGELMW 240
QY 241 QAEARSSSKSWITFDLNKKEVSVKRVTDPRLOQKGLPHLTLPOALPOYAGSGNLTIA 300
DB 241 QAEARSSSKSWITFDLNKKEVSVKRVTDPRLOQKGLPHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKLGHOEVNLVVMRATOLQKNLTCCEVWGPTSPKLMSTLKENKAKVSKREKPYW 360
DB 301 LEAKTGKLGHOEVNLVVMRATOLQKNLTCCEVWGPTSPKLMSTLKENKAKVSKREKPYW 360
QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401

RESULT 25

PCT-US95-00454-4

Sequence 4, Application PC/TUS9500454
GENERAL INFORMATION:
APPLICANT: Seed, Brian et al.
TITLE OF INVENTION: Targeted Cytolysis of HIV-Infected
TITLE OF INVENTION: Cells by Chimeric CD4 Receptor-
TITLE OF INVENTION: Bearing Cells
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110-2804
COMPUTER READABLE FORM:

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/ MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
/ COMPUTER: IBM PS/2 Model 502 or 55SX
/ OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
/ SOFTWARE: Wordperfect (Version 5.0)
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: PCT/US95/00454
/ FILING DATE:
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 07/847,566
/ FILING DATE: March 6, 1992
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 07/665,961
/ FILING DATE: March 7, 1991
/ CLASSIFICATION:
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Clark, Paul T.
/ REGISTRATION NUMBER: 30,162
/ REFERENCE/DOCKET NUMBER: 00786/247001
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (617) 542-5070
/ TELEFAX: (617) 542-8906
/ TELETYPE: 200154
/ INFORMATION FOR SEQ ID NO: 4:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 575 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
PCT-US95-00454-4
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Query Match 59.7%; Score 2039; DB 5; Length 575;
Best Local Similarity 99.0%; Pred. No. 5.6e-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVFPHLLVLTQALLPATQGNKVLGKGGDTVELTCTASQKKSIOFHMKNSNOIK 60
DB 1 MNRGVFPHLLVLTQALLPATQGNKVLGKGGDTVELTCTASQKKSIOFHMKNSNOIK 60
QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDTHLLOGOSLTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDTHLLOGOSLTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCTVLQNOQKVEFKIDIVLAFQKASSIVYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKVEFKIDIVLAFQKASSIVYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKLNQEVNLVYMRATQLOKNTLCEWGPSPKMLSLKLENKAKVSKREKPVWV 360
DB 301 LEAKTGKLNQEVNLVYMRATQLOKNTLCEWGPSPKMLSLKLENKAKVSKREKPVWV 360
QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401
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```
RESULT 26
US-08-466-368-4
; Sequence 4, Application US/08466368
; Patent No. 6093539
; GENERAL INFORMATION:
; APPLICANT: Maddon, Paul J.
; APPLICANT: Litten, Dan R.
; APPLICANT: Chess, Leonard
```

```
/ APPLICANT: Axel, Richard
/ APPLICANT: Weiss, Robin
/ APPLICANT: McDougal, J. S.
/ TITLE OF INVENTION: DNA ENCODING THE T CELL SURFACE PROTEIN
/ NUMBER OF SEQUENCES: 21
/ CORRESPONDENCE ADDRESS:
/ ADDRESS: Cooper & Dunham LLP
/ STREET: 1185 Avenue of Americas
/ CITY: New York
/ STATE: New York
/ COUNTRY: USA
/ ZIP: 10036
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/466,368
/ FILING DATE: 06-JUN-1995
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: White, John P.
/ REGISTRATION NUMBER: 28,678
/ REFERENCE/DOCKET NUMBER: 24577-E1-B/JPW/ACC
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 212-278-0400
/ TELEFAX: 212-391-0525
/ INFORMATION FOR SEQ ID NO: 4:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 458 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
US-08-466-368-4
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```
Query Match 59.7%; Score 2038; DB 3; Length 458;
Best Local Similarity 99.7%; Pred. No. 4.8e-156;
Matches 395; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MNRGVFPHLLVLTQALLPATQGNKVLGKGGDTVELTCTASQKKSIOFHMKNSNOIK 60
DB 1 MNRGVFPHLLVLTQALLPATQGNKVLGKGGDTVELTCTASQKKSIOFHMKNSNOIK 60
QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDTHLLOGOSLTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDTHLLOGOSLTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCTVLQNOQKVEFKIDIVLAFQKASSIVYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKVEFKIDIVLAFQKASSIVYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKLNQEVNLVYMRATQLOKNTLCEWGPSPKMLSLKLENKAKVSKREKPVWV 360
DB 301 LEAKTGKLNQEVNLVYMRATQLOKNTLCEWGPSPKMLSLKLENKAKVSKREKPVWV 360
QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV 396
DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV 396
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```
RESULT 27
US-08-417-495-5
; Sequence 5, Application US/08417495
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```
/ Patent No. 5843728
/ GENERAL INFORMATION:
/ APPLICANT: Seed, Brian et al.
/ TITLE OF INVENTION: Redirection of Cellular Immunity by
/ TITLE OF INVENTION: Receptor
/ NUMBER OF SEQUENCES: 27
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Fish & Richardson
/ STREET: 225 Franklin Street
/ CITY: Boston
/ STATE: MA
/ COUNTRY: USA
/ ZIP: 02110-2804
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
/ COMPUTER: IBM PS/2 Model 502 or 555X
/ OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
/ SOFTWARE: Wordperfect (Version 5.0)
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/417,495
/ FILING DATE:
/ CLASSIFICATION: 435
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US/08/203,866
/ FILING DATE:
/ APPLICATION NUMBER: US/07/847,566
/ FILING DATE:
/ APPLICATION NUMBER: 07/665,961
/ FILING DATE: March 7, 1991
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Clark, Paul T.
/ REGISTRATION NUMBER: 30,162
/ REFERENCE/DOCKET NUMBER: 00786/119002
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (617) 542-5070
/ TELEFAX: (617) 542-8906
/ TELEX: 200154
/ INFORMATION FOR SEQ ID NO: 5:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 462 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ US-08-417-495-5

Query Match 59.6%; Score 2035; DB 2; Length 462;
Best Local Similarity 98.8%; Pred. No. 8.5e-156;
Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVPFRHLILVQLALLPAATQGNKVVLGKKGDTVELTCTASQKSIOPFMKNSNOIK 60
DB 1 MNRGVPFRHLILVQLALLPAATQGNKVVLGKKGDTVELTCTASQKSIOPFMKNSNOIK 60
QY 61 ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGILTANSDTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGILTANSDTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 121 LVFGILTANSDTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGILTANSDTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVTLNOKKVEFKIDIVLAFQKASSIYVKKSGEDEVSPFLAFTVEKLTGSGELMW 240
DB 181 TWTCVTLNOKKVEFKIDIVLAFQKASSIYVKKSGEDEVSPFLAFTVEKLTGSGELMW 240
QY 241 QABRASSSSKSWITPDLKKEVSVKRVTDQPKLQMGKULPLHLTLPQALPOYAGSGLTLTA 300
DB 241 QABRASSSSKSWITPDLKKEVSVKRVTDQPKLQMGKULPLHLTLPQALPOYAGSGLTLTA 300
QY 301 LEAKTGKGLHQBVLVVMRATQLOKULTEWVGPTSPKMLSLKENKAKYSKREKPVW 360
DB 301 LEAKTGKGLHQBVLVVMRATQLOKULTEWVGPTSPKMLSLKENKAKYSKREKPVW 360
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QY 361 LNPEAGMWOCLSDSGVLLSENIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMWOCLSDSGVLLSENIKVLPTWSTPVHADPOLC 401

RESULT 28
US-08-284-391B-5
/ Sequence 5, Application US/08284391B
/ Patent No. 5851828
/ GENERAL INFORMATION:
/ APPLICANT: Seed, Brian
/ APPLICANT: Banapour, Babak
/ APPLICANT: Romeo, Charles
/ APPLICANT: Kolanus, Waldemar
/ TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
/ TITLE OF INVENTION: CELLS BY CHIMERIC CD4 RECEPTOR-BEARING CELLS
/ NUMBER OF SEQUENCES: 53
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Clark & Elbing LLP
/ STREET: 176 Federal Street
/ CITY: Boston
/ STATE: MA
/ COUNTRY: USA
/ ZIP: 02110
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Diskette
/ COMPUTER: IBM Compatible
/ OPERATING SYSTEM: DOS
/ SOFTWARE: FastSeq for Windows Version 2.0
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/284,391B
/ FILING DATE: 02-AUG-1994
/ CLASSIFICATION: 514
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 08/195,395
/ FILING DATE: 14-FEB-1994
/ APPLICATION NUMBER: 07/847,566
/ FILING DATE: 06-MAR-1992
/ APPLICATION NUMBER: 07/665,961
/ FILING DATE: 07-MAR-1991
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Elbing, Karen L.
/ REGISTRATION NUMBER: 35,238
/ REFERENCE/DOCKET NUMBER: 00786/247001
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 617-428-0200
/ TELEFAX: 617-428-7045
/ TELEX:
/ INFORMATION FOR SEQ ID NO: 5:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 462 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ US-08-284-391B-5

Query Match 59.6%; Score 2035; DB 2; Length 462;
Best Local Similarity 98.8%; Pred. No. 8.5e-156;
Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVPFRHLILVQLALLPAATQGNKVVLGKKGDTVELTCTASQKSIOPFMKNSNOIK 60
DB 1 MNRGVPFRHLILVQLALLPAATQGNKVVLGKKGDTVELTCTASQKSIOPFMKNSNOIK 60
QY 61 ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGILTANSDTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGILTANSDTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
```


QY 181 TWTCTVLONOKKVEFKIDIVLAFOKASSIYVKEGEQVEFSPPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLONOKKVEFKIDIVLAFOKASSIYVKEGEQVEFSPPLAFTVEKLTGSGELMW 240
QY 241 QAEKASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPOALPOYAGSGNLTIA 300
DB 241 QAEKASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYVW 360
DB 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYVW 360
QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPOLC 401

RESULT 29
US-09-218-950-5
Sequence 5, Application US/09218950
Patent No. 6284240
GENERAL INFORMATION:
APPLICANT: Seed, Brian
APPLICANT: Banapour, Babak
APPLICANT: Romeo, Charles
APPLICANT: Kolanus, Waldemar
TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
NUMBER OF SEQUENCES: 53
CORRESPONDENCE ADDRESS:
ADDRESSEE: Clark & Elbing LLP
STREET: 176 Federal Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/218,950
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/284,391
FILING DATE: 02-AUG-1994
APPLICATION NUMBER: 08/195,395
FILING DATE: 14-FEB-1994
APPLICATION NUMBER: 07/847,566
FILING DATE: 06-MAR-1992
APPLICATION NUMBER: 07/665,961
FILING DATE: 07-MAR-1991
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L.
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/247001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045
TELEX:
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 462 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-218-950-5

Query Match 59.6%; Score 2035; DB 3; Length 462;

Best Local Similarity 98.8%; Pred. No. 8.5e-156;
Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;
QY 1 MNRGVPFPHLLIVLQALLPAATQGNKVVLLGKGGTVELTCTASGSKSIQTHWKNNOIK 60
DB 1 MNRGVPFPHLLIVLQALLPAATQGNKVVLLGKGGTVELTCTASGSKSIQTHWKNNOIK 60
QY 61 ILGNQSFLLTGSPSKLNRADSRRLMDQGNPLIKLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILGNQSFLLTGSPSKLNRADSRRLMDQGNPLIKLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDFHLQGGSLTTLTLESPPGSSPSVQCRSPRGNNIOGKTLVSQLELODSG 180
DB 121 LVFGLTANSDFHLQGGSLTTLTLESPPGSSPSVQCRSPRGNNIOGKTLVSQLELODSG 180
QY 181 TWTCTVLONOKKVEFKIDIVLAFOKASSIYVKEGEQVEFSPPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLONOKKVEFKIDIVLAFOKASSIYVKEGEQVEFSPPLAFTVEKLTGSGELMW 240
QY 241 QAEKASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPOALPOYAGSGNLTIA 300
DB 241 QAEKASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYVW 360
DB 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYVW 360
QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPOLC 401

RESULT 30
PCT-US92-01785-5
Sequence 5, Application PC/TUS9201785
GENERAL INFORMATION:
APPLICANT: The General Hospital Corporation
TITLE OF INVENTION: Redirection of Cellular Immunity by Receptor
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 55SX
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: Wordperfect (Version 5.0)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/01785
FILING DATE: 19920306
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/665,961
FILING DATE: March 7, 1991
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/119002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 462 amino acids
TYPE: AMINO ACID
TOPOLOGY: linear
MOLECULE TYPE: protein

PCT-US92-01785-5

Query Match 59.6%; Score 2035; DB 5; Length 462;
Best Local Similarity 98.8%; Pred. No. 8.5e-156;
Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVPFRHLIVLQALPPAATQGNKVLGKGGDTVELCTASQKSIQPHWKNNOIK 60
DB 1 MNRGVPFRHLIVLQALPPAATQGNKVLGKGGDTVELCTASQKSIQPHWKNNOIK 60
QY 61 ILNGSGFLTKGSPKLNDRADSRSLWDQGNFPLIINKLIEDSDTYICEVEDQKEEVOL 120
DB 61 ILNGSGFLTKGSPKLNDRADSRSLWDQGNFPLIINKLIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSPTHLLQGSGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLISVQLELDQSG 180
DB 121 LVFGLTANSPTHLLQGSGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLISVQLELDQSG 180
QY 181 TWCTVTONOKKVEFKIDIVLAFOKASSIYKKEGQVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWCTVTONOKKVEFKIDIVLAFOKASSIYKKEGQVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAEBSASSKSWITFDLKNKEVSVKRVTDPKLQWKKLPHLTLPOALPYAGSGNLTLA 300
DB 241 QAEBSASSKSWITFDLKNKEVSVKRVTDPKLQWKKLPHLTLPOALPYAGSGNLTLA 300
QY 301 LEAKTGKLEHVEVNLVVMRATOLQKNLTCEVWGPTSPKLMSTLKENKAKYSKREKPYWV 360
DB 301 LEAKTGKLEHVEVNLVVMRATOLQKNLTCEVWGPTSPKLMSTLKENKAKYSKREKPYWV 360
QY 361 LNPEAGMOCCLSDSGVLESNIKVLPWTSTPV--EPKSC 399
DB 361 LNPEAGMOCCLSDSGVLESNIKVLPWTSTPVHADPOLC 401

RESULT 31

PCT-US95-00454-5
; Sequence 5, Application PC/TUS9500454
; GENERAL INFORMATION:

APPLICANT: Seed, Brian et al.

TITLE OF INVENTION: Targeted Cytolysis of HIV-Infected

TITLE OF INVENTION: Cells by Chimieic CD4 Receptor-

NUMBER OF SEQUENCES: 27

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson

CITY: Boston

STATE: MA

COUNTRY: USA

ZIP: 02110-2804

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5" Diskette, 1.44 Mb

OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)

SOFTWARE: Wordperfect (Version 5.0)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US95/00454

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/647,566

FILING DATE: March 6, 1992

CLASSIFICATION:

PRIOR APPLICATION DATA:

TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 462 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
PCT-US95-00454-5

Query Match 59.6%; Score 2035; DB 5; Length 462;
Best Local Similarity 98.8%; Pred. No. 8.5e-156;
Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVPFRHLIVLQALPPAATQGNKVLGKGGDTVELCTASQKSIQPHWKNNOIK 60
DB 1 MNRGVPFRHLIVLQALPPAATQGNKVLGKGGDTVELCTASQKSIQPHWKNNOIK 60
QY 61 ILNGSGFLTKGSPKLNDRADSRSLWDQGNFPLIINKLIEDSDTYICEVEDQKEEVOL 120
DB 61 ILNGSGFLTKGSPKLNDRADSRSLWDQGNFPLIINKLIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSPTHLLQGSGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLISVQLELDQSG 180
DB 121 LVFGLTANSPTHLLQGSGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLISVQLELDQSG 180
QY 181 TWCTVTONOKKVEFKIDIVLAFOKASSIYKKEGQVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWCTVTONOKKVEFKIDIVLAFOKASSIYKKEGQVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAEBSASSKSWITFDLKNKEVSVKRVTDPKLQWKKLPHLTLPOALPYAGSGNLTLA 300
DB 241 QAEBSASSKSWITFDLKNKEVSVKRVTDPKLQWKKLPHLTLPOALPYAGSGNLTLA 300
QY 301 LEAKTGKLEHVEVNLVVMRATOLQKNLTCEVWGPTSPKLMSTLKENKAKYSKREKPYWV 360
DB 301 LEAKTGKLEHVEVNLVVMRATOLQKNLTCEVWGPTSPKLMSTLKENKAKYSKREKPYWV 360
QY 361 LNPEAGMOCCLSDSGVLESNIKVLPWTSTPV--EPKSC 399
DB 361 LNPEAGMOCCLSDSGVLESNIKVLPWTSTPVHADPOLC 401

RESULT 32
US-08-328-500-9
; Sequence 9, Application US/08328500
; Patent No. 6673896
; GENERAL INFORMATION:
APPLICANT: Maddon, Paul J.
APPLICANT: Axel, Richard
APPLICANT: Sweet, Richard W.
APPLICANT: Athos, James
TITLE OF INVENTION: DERIVATIVES OF SOLUBLE T-4
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham
STREET: 1185 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/328,500
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.

```

;
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 0575/24577-CY
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 278-0400
; TELEFAX: (212) 391-0525
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 457 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
;
US-08-328-500-9

Query Match          59.5%; Score 2030; DB 4; Length 457;
Best Local Similarity 99.5%; Pred. No. 2,1e-155;
Matches 394; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 NMRGVFPRHLLVLQALLPAAATQGNKVVLGKKGDVETLTASQKKSIOFHWKNSNOIK 60
DB 1 NMRGVFPRHLLVLQALLPAAATQGNKVVLGKKGDVETLTASQKKSIOFHWKNSNOIK 60
QY 61 IINGGSEFLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSPYICEVEDQKEEYQL 120
DB 61 IINGGSEFLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSPYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDTHLQGSLLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLQGSLLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQONQKVEKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQONQKVEKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTOPPKLQMGKLLPLHLTLPOALPQYAGSGNLTLA 300
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTOPPKLQMGKLLPLHLTLPOALPQYAGSGNLTLA 300
QY 301 LEAKTGKLEHDEVNLYVMRATQLOKULTCEVWGPTSPKMLSLKLENKEAKVSKREKPYWV 360
DB 301 LEAKTGKLEHDEVNLYVMRATQLOKULTCEVWGPTSPKMLSLKLENKEAKVSKREKPYWV 360
QY 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPVP 396
DB 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPVP 396

RESULT 33
US-08-284-391B-29
; Sequence 29, Application US/08284391B
; Patent No. 5851828
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; APPLICANT: Banapour, Babak
; APPLICANT: Romeo, Charles
; APPLICANT: Kolanus, Waldemar
; TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
; TITLE OF INVENTION: CELLS BY CHIMERIC CD4 RECEPTOR- BEARING CELLS
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FASTSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/284,391B
; FILING DATE: 02-AUG-1994
```

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;
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/195,395
; FILING DATE: 14-FEB-1994
; APPLICATION NUMBER: 07/847,566
; FILING DATE: 06-MAR-1992
; APPLICATION NUMBER: 07/665,961
; FILING DATE: 07-MAR-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Elbing, Karen L
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/247001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
;
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 398 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
;
US-08-284-391B-29

Query Match          59.4%; Score 2029; DB 2; Length 398;
Best Local Similarity 100.0%; Pred. No. 2,1e-155;
Matches 394; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NMRGVFPRHLLVLQALLPAAATQGNKVVLGKKGDVETLTASQKKSIOFHWKNSNOIK 60
DB 1 NMRGVFPRHLLVLQALLPAAATQGNKVVLGKKGDVETLTASQKKSIOFHWKNSNOIK 60
QY 61 IINGGSEFLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSPYICEVEDQKEEYQL 120
DB 61 IINGGSEFLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSPYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDTHLQGSLLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLQGSLLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQONQKVEKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQONQKVEKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTOPPKLQMGKLLPLHLTLPOALPQYAGSGNLTLA 300
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTOPPKLQMGKLLPLHLTLPOALPQYAGSGNLTLA 300
QY 301 LEAKTGKLEHDEVNLYVMRATQLOKULTCEVWGPTSPKMLSLKLENKEAKVSKREKPYWV 360
DB 301 LEAKTGKLEHDEVNLYVMRATQLOKULTCEVWGPTSPKMLSLKLENKEAKVSKREKPYWV 360
QY 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPV 394
DB 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPV 394

RESULT 34
US-09-218-950-29
; Sequence 29, Application US/09218950
; Patent No. 6284240
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; APPLICANT: Banapour, Babak
; APPLICANT: Romeo, Charles
; APPLICANT: Kolanus, Waldemar
; TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
; TITLE OF INVENTION: CELLS BY CHIMERIC CD4 RECEPTOR- BEARING CELLS
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
```

```
/ CITY: Boston
/ STATE: MA
/ COUNTRY: USA
/ ZIP: 02110
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Diskette
/ OPERATING SYSTEM: DOS
/ SOFTWARE: FastSeq for Windows Version 2.0
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/218,950
/ FILING DATE:
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US/08/284,391
/ FILING DATE: 02-AUG-1994
/ APPLICATION NUMBER: 08/195,395
/ FILING DATE: 14-FEB-1994
/ APPLICATION NUMBER: 07/847,566
/ FILING DATE: 06-MAR-1992
/ APPLICATION NUMBER: 07/665,961
/ FILING DATE: 07-MAR-1991
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Eiding, Karen L
/ REGISTRATION NUMBER: 35,238
/ REFERENCE/DOCKET NUMBER: 00786/247001
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 617-428-0200
/ TELEFAX: 617-428-7045
/ TELEX:
/ INFORMATION FOR SEQ ID NO: 29:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 398 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ US-09-218-950-29

Query Match      59.4%; Score 2029; DB 3; Length 398;
Best Local Similarity 100.0%; Pred. No. 2.1e-155;
Matches 394; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MNRGVPFRHLLVLTQALLPRAATQGNKVVLGKKGDTVELTCTASQKSIQPHMKNNSQIK 60
DB 1 MNRGVPFRHLLVLTQALLPRAATQGNKVVLGKKGDTVELTCTASQKSIQPHMKNNSQIK 60
QY 61 ILNGSGFLTKGPKSLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILNGSGFLTKGPKSLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDTHLQGGSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLQGGSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWCTCTVLQONQKVEFKIDIVLAFQKASSIYVKKEGEVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWCTCTVLQONQKVEFKIDIVLAFQKASSIYVKKEGEVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAEERASSKSWITFDLKNKEVSVKRVTDQPKLQMGKPLPHLTLPOALPOYAGSGNLTIA 300
DB 241 QAEERASSKSWITFDLKNKEVSVKRVTDQPKLQMGKPLPHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKHOEVNLVVMRATQLOKNLTCEVWGPTSPKLMLSLKENKEAKVSKREKPYVW 360
DB 301 LEAKTGKHOEVNLVVMRATQLOKNLTCEVWGPTSPKLMLSLKENKEAKVSKREKPYVW 360
QY 361 LNPEAGMWQCLSDSGOVLLESNINIVLPTWSTPV 394
DB 361 LNPEAGMWQCLSDSGOVLLESNINIVLPTWSTPV 394

RESULT 35
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US-09-039-555B-15
/ Sequence 15, Application US/09039555B
/ Patent No. 6033856
/ GENERAL INFORMATION:
/ APPLICANT: Koerner, Kathrin
/ APPLICANT: Mueller, Rolf
/ APPLICANT: Sadiacek, Hans-Harald
/ TITLE OF INVENTION: PROMOTER OF THE CDC25B GENE, ITS
/ NUMBER OF INVENTION: PREPARATION AND USE
/ NUMBER OF SEQUENCES: 19
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Foley & Lardner
/ STREET: 3000 K Street, N.W., Suite 500
/ CITY: Washington
/ STATE: D.C.
/ COUNTRY: USA
/ ZIP: 20007-5109
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: IBM PC compatible
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/039,555B
/ FILING DATE: 16-MAR-1998
/ CLASSIFICATION: 514
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: DE 19710643.9
/ FILING DATE: 14-MAR-1997
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Bent, Stephen A.
/ REGISTRATION NUMBER: 29,768
/ REFERENCE/DOCKET NUMBER: 016779/0131
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (202) 672-5300
/ TELEFAX: (202) 672-5399
/ TELEX: 904136
/ INFORMATION FOR SEQ ID NO: 15:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 458 amino acids
/ TYPE: amino acid
/ STRANDEDNESS:
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ US-09-039-555B-15

Query Match      59.3%; Score 2024; DB 3; Length 458;
Best Local Similarity 99.2%; Pred. No. 6.4e-155;
Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 MNRGVPFRHLLVLTQALLPRAATQGNKVVLGKKGDTVELTCTASQKSIQPHMKNNSQIK 60
DB 1 MNRGVPFRHLLVLTQALLPRAATQGNKVVLGKKGDTVELTCTASQKSIQPHMKNNSQIK 60
QY 61 ILNGSGFLTKGPKSLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILNGSGFLTKGPKSLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDTHLQGGSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLQGGSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWCTCTVLQONQKVEFKIDIVLAFQKASSIYVKKEGEVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWCTCTVLQONQKVEFKIDIVLAFQKASSIYVKKEGEVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAEERASSKSWITFDLKNKEVSVKRVTDQPKLQMGKPLPHLTLPOALPOYAGSGNLTIA 300
DB 241 QAEERASSKSWITFDLKNKEVSVKRVTDQPKLQMGKPLPHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKHOEVNLVVMRATQLOKNLTCEVWGPTSPKLMLSLKENKEAKVSKREKPYVW 360
DB 301 LEAKTGKHOEVNLVVMRATQLOKNLTCEVWGPTSPKLMLSLKENKEAKVSKREKPYVW 360
```

QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEP 396
DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEP 396

RESULT 36
US-08-236-311-1
Sequence 1, Application US/08236311
Patent No. 5565335
GENERAL INFORMATION:
APPLICANT: Capon, Daniel J.
APPLICANT: Gregory, Timothy J.
TITLE OF INVENTION: Adhesion Variants
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: patin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/236,311
FILING DATE: 02-MAY-1994
CLASSIFICATION: 435
PRIOR APPLICATION NUMBER:
APPLICATION NUMBER: 07/936190
FILING DATE: 26-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/842777
FILING DATE: 18-FEB-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/250785
FILING DATE: 28-SEP-1988
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/104329
FILING DATE: 02-OCT-1987
ATTORNEY/AGENT INFORMATION:
NAME: Hasek, Janet E.
REGISTRATION NUMBER: 28,616
REFERENCE/DOCKET NUMBER: 444P1C2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/225-1896
TELEFAX: 415/952-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 402 amino acids
TYPE: amino acid
TOPOLOGY: linear
US-08-236-311-1

Query Match 59.1%; Score 2017; DB 1; Length 402;
Best Local Similarity 99.7%; Pred. No. 2e-154;
Matches 392; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 NMRGVPFRLLLVLOALALPAATQGNKVVLGKKGDVETLTCAASQKSIQFHWKSNQIK 60
DB 1 NMRGVPFRLLLVLOALALPAATQGNKVVLGKKGDVETLTCAASQKSIQFHWKSNQIK 60
QY 61 IIGNGSFLTKGSPSKUNDRADSRSLMDQGNFPLIINKIKIEDSDTYICEVEQKEEVOL 120
DB 61 IIGNGSFLTKGSPSKUNDRADSRSLMDQGNFPLIINKIKIEDSDTYICEVEQKEEVOL 120
QY 121 LVFGLTANSDBTHLLOQOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDBTHLLOQOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180

QY 181 TWCTVLONOKKVEEKIDIVTLAFQKASSIYKKEGEVERSPPLAFTVEXLTGSGELMW 240
DB 181 TWCTVLONOKKVEEKIDIVTLAFQKASSIYKKEGEVERSPPLAFTVEXLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTOPPKLQMGKULPLHLTLPOALPOVAGSGLTLA 300
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTOPPKLQMGKULPLHLTLPOALPOVAGSGLTLA 300
QY 301 LEAKTGKLEHVEVNLVYMRATOLQKULTCEWGPSTPKMLSLKLENKAKYSKREKPVW 360
DB 301 LEAKTGKLEHVEVNLVYMRATOLQKULTCEWGPSTPKMLSLKLENKAKYSKREKPVW 360
QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTP 393
DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTP 393

RESULT 37
US-08-457-918-1
Sequence 1, Application US/08457918
Patent No. 6117655
GENERAL INFORMATION:
APPLICANT: Capon, Daniel J.
APPLICANT: Gregory, Timothy J.
TITLE OF INVENTION: Adhesion Variants
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: patin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/457,918
FILING DATE: 1-JUN-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/236311
FILING DATE: 02-MAY-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/936190
FILING DATE: 26-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/842777
FILING DATE: 18-FEB-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/250785
FILING DATE: 28-SEP-1988
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/104329
FILING DATE: 02-OCT-1987
ATTORNEY/AGENT INFORMATION:
NAME: Rubinec, Jeffrey S.
REGISTRATION NUMBER: 36,575
REFERENCE/DOCKET NUMBER: P0444P1C3
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/225-8228
TELEFAX: 415/952-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 402 amino acids
TYPE: amino acid
TOPOLOGY: linear
US-08-457-918-1

Query Match. 59.1%; Score 2017; DB 3; Length 402;
 Best Local Similarity 99.7%; Pred. No. 2e-154;
 Matches 392; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MNRGVPFRHLLIVLQALLPAATQGNKVVLGKGGDTVELTCTAQSOKSIOPHMKNNSQIK 60
 DB 1 MNRGVPFRHLLIVLQALLPAATQGNKVVLGKGGDTVELTCTAQSOKSIOPHMKNNSQIK 60
 QY 61 ILNGSGSLTGGPSKLNDRADSRSLMDQGNFPLIKNLKIEDSTYICVEDQKEEVOL 120
 DB 61 ILNGSGSLTGGPSKLNDRADSRSLMDQGNFPLIKNLKIEDSTYICVEDQKEEVOL 120
 QY 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWCTVLOKQKVEFKIDIVLAFQKASSIVYKKEGQEVESFPPLAFVTEKLTGSGELMW 240
 DB 181 TWCTVLOKQKVEFKIDIVLAFQKASSIVYKKEGQEVESFPPLAFVTEKLTGSGELMW 240
 QY 241 QABRASSKSMITPDLKNKEVSVKRVTDPKLQMGKPLHLTLTPOALPOYAGSGNLTIA 300
 DB 241 QABRASSKSMITPDLKNKEVSVKRVTDPKLQMGKPLHLTLTPOALPOYAGSGNLTIA 300
 QY 301 LEAKTGKHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKLENKAKVSKKEKPYW 360
 DB 301 LEAKTGKHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKLENKAKVSKKEKPYW 360
 QY 361 LNPEAGMOCCLSDSGVLLBSNIVLPTWSTP 393
 DB 361 LNPEAGMOCCLSDSGVLLBSNIVLPTWSTP 393

RESULT 38

US-09-517-605-3
 ; Sequence 3, Application US/09517605
 ; Patent No. 6391567
 ; GENERAL INFORMATION:
 ; APPLICANT: Littman, Dan R.
 ; APPLICANT: Kwon, Douglas S.
 ; APPLICANT: van Kooyk, Yvette
 ; APPLICANT: Gellenebeck, Theo
 ; TITLE OF INVENTION: METHODS OF USING A FACILITATOR OF RETROVIRAL ENTRY INTO
 ; FILE REFERENCE: 1049-1-017
 ; CURRENT APPLICATION NUMBER: US/09/517,605
 ; CURRENT FILING DATE: 2000-03-02
 ; NUMBER OF SEQ ID NOS: 17
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 3
 ; LENGTH: 458
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-09-517-605-3

Query Match. 59.1%; Score 2016; DB 4; Length 458;
 Best Local Similarity 99.0%; Pred. No. 2.8e-154;
 Matches 392; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 1 MNRGVPFRHLLIVLQALLPAATQGNKVVLGKGGDTVELTCTAQSOKSIOPHMKNNSQIK 60
 DB 1 MNRGVPFRHLLIVLQALLPAATQGNKVVLGKGGDTVELTCTAQSOKSIOPHMKNNSQIK 60
 QY 61 ILNGSGSLTGGPSKLNDRADSRSLMDQGNFPLIKNLKIEDSTYICVEDQKEEVOL 120
 DB 61 ILNGSGSLTGGPSKLNDRADSRSLMDQGNFPLIKNLKIEDSTYICVEDQKEEVOL 120
 QY 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWCTVLOKQKVEFKIDIVLAFQKASSIVYKKEGQEVESFPPLAFVTEKLTGSGELMW 240
 DB 181 TWCTVLOKQKVEFKIDIVLAFQKASSIVYKKEGQEVESFPPLAFVTEKLTGSGELMW 240

DB 181 TWCTVLOKQKVEFKIDIVLAFQKASSIVYKKEGQEVESFPPLAFVTEKLTGSGELMW 240
 QY 241 QABRASSKSMITPDLKNKEVSVKRVTDPKLQMGKPLHLTLTPOALPOYAGSGNLTIA 300
 DB 241 QABRASSKSMITPDLKNKEVSVKRVTDPKLQMGKPLHLTLTPOALPOYAGSGNLTIA 300
 QY 301 LEAKTGKHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKLENKAKVSKKEKPYW 360
 DB 301 LEAKTGKHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKLENKAKVSKKEKPYW 360
 QY 361 LNPEAGMOCCLSDSGVLLBSNIVLPTWSTP 396
 DB 361 LNPEAGMOCCLSDSGVLLBSNIVLPTWSTP 396

RESULT 39

US-08-466-368-2
 ; Sequence 2, Application US/08466368
 ; Patent No. 6093539
 ; GENERAL INFORMATION:
 ; APPLICANT: Maddon, Paul J.
 ; APPLICANT: Littman, Dan R.
 ; APPLICANT: Chess, Leonard
 ; APPLICANT: Axel, Richard
 ; APPLICANT: Weiss, Robin
 ; APPLICANT: McDougal, J. S.
 ; TITLE OF INVENTION: DNA ENCODING THE T CELL SURFACE PROTEIN
 ; FILE REFERENCE: T4 AND USE OF FRAGMENTS OF T4 IN THE TREATMENT OF AIDS
 ; NUMBER OF SEQUENCES: 21
 ; CORRESPONDENCE ADDRESSES:
 ; ADDRESSEE: Cooper & Dunham LLP
 ; STREET: 1185 Avenue of Americas
 ; CITY: New York
 ; STATE: New York
 ; COUNTRY: USA
 ; ZIP: 10036
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/466,368
 ; FILING DATE: 06-JUN-1995
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: White, John P.
 ; REGISTRATION NUMBER: 28,678
 ; REFERENCE/DOCKET NUMBER: 24577-EI-B/JPM/AKC
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 212-278-0400
 ; TELEFAX: 212-391-0525
 ; INFORMATION FOR SEQ ID NO: 2:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 394 amino acids
 ; TYPE: amino acid
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 ; US-08-466-368-2

Query Match. 58.6%; Score 2001; DB 3; Length 394;
 Best Local Similarity 98.7%; Pred. No. 3.7e-153;
 Matches 389; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY 1 MNRGVPFRHLLIVLQALLPAATQGNKVVLGKGGDTVELTCTAQSOKSIOPHMKNNSQIK 60
 DB 1 MNRGVPFRHLLIVLQALLPAATQGNKVVLGKGGDTVELTCTAQSOKSIOPHMKNNSQIK 60
 QY 61 ILNGSGSLTGGPSKLNDRADSRSLMDQGNFPLIKNLKIEDSTYICVEDQKEEVOL 120
 DB 61 ILNGSGSLTGGPSKLNDRADSRSLMDQGNFPLIKNLKIEDSTYICVEDQKEEVOL 120
 QY 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180

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Db 121 LVFGLTANS DTHLLQGOSITLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Qy 181 TWCTCTVLQNOKKVEFKIDIVLAFQKASSIYVKKEGEVESPFLAFTVEKLTGSGELMW 240
Db 181 TWCTCTVLQNOKKVEFKIDIVLAFQKASSIYVKKEGEVDFFSFLAFTVEKLTGSGELMW 240
Qy 241 QAERASSSKSWITTFDLKXKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOVAGSGLTLTA 300
Db 241 QAERASSSKSWITTFDLKXKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOVAGSGLTLTA 300
Qy 301 LEAKTGKGLHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPVVW 360
Db 301 LEAKTGKGLHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKAKVSKREKAVVW 360
Qy 361 LNPEAGMMOCLLSDSGOVLLESNIKVLPTWSTPV 394
Db 361 LNPEAGMMOCLLSDSGOVLLESNIKVLPTWSTPV 394
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RESULT 40

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US-08-328-500-2
; Sequence 2, Application US/08328500
; Patent No. 6673896
; GENERAL INFORMATION:
; APPLICANT: Maddon, Paul J.
; APPLICANT: Axel, Richard W.
; APPLICANT: Sweet, Richard W.
; APPLICANT: Arthos, James
; TITLE OF INVENTION: DERIVATIVES OF SOLUBLE T-4
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooper & Dunham
; STREET: 1185 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/328,500
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 0575/24577-CY
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 278-0400
; TELEFAX: (212) 391-0525
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 394 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-328-500-2
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Query Match 58.6%; Score 2001; DB 4; Length 394;
Best Local Similarity 98.7%; Pred. No. 3, 7e-153;
Matches 389; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
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Qy 1 MNRGVFPRHLLVLQALLPAATQGNKVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60
Db 1 MNRGVFPRHLLVLQALLPAATQGNKVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60
Qy 61 ILGNQGSFLTQGPSKLNDRADSRSLMDQGNFPLITIKNLKIEDSDTYICEVEDQKEVQL 120
Db 61 ILGNQGSFLTQGPSKLNDRADSRSLMDQGNFPLITIKNLKIEDSDTYICEVEDQKEVQL 120
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Qy 121 LVFGLTANS DTHLLQGOSITLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Db 121 LVFGLTANS DTHLLQGOSITLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Qy 181 TWCTCTVLQNOKKVEFKIDIVLAFQKASSIYVKKEGEVESPFLAFTVEKLTGSGELMW 240
Db 181 TWCTCTVLQNOKKVEFKIDIVLAFQKASSIYVKKEGEVDFFSFLAFTVEKLTGSGELMW 240
Qy 241 QAERASSSKSWITTFDLKXKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOVAGSGLTLTA 300
Db 241 QAERASSSKSWITTFDLKXKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOVAGSGLTLTA 300
Qy 301 LEAKTGKGLHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPVVW 360
Db 301 LEAKTGKGLHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKAKVSKREKAVVW 360
Qy 361 LNPEAGMMOCLLSDSGOVLLESNIKVLPTWSTPV 394
Db 361 LNPEAGMMOCLLSDSGOVLLESNIKVLPTWSTPV 394
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RESULT 41
5223394-7
; Patent No. 5223394
; APPLICANT: WALLNER, BARBARA
; TITLE OF INVENTION: RECOMBINANT DNA MOLECULE COMPRISING
; LYMPHOCYTE FUNCTION-ASSOCIATED ANTIGEN 3 PHOSPHATIDYLINOSITOL
; LINKAGE SIGNAL SEQUENCE
; NUMBER OF SEQUENCES: 12
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/335,688
; FILING DATE: 10-APR-1989
; SEQ ID NO: 7;
; LENGTH: 458
5223394-7
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Query Match 58.5%; Score 1998; DB 6; Length 458;
Best Local Similarity 98.2%; Pred. No. 8e-153;
Matches 389; Conservative 1; Mismatches 6; Indels 0; Gaps 0;
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Qy 1 MNRGVFPRHLLVLQALLPAATQGNKVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60
Db 1 MNRGVFPRHLLVLQALLPAATQGNKVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60
Qy 61 ILGNQGSFLTQGPSKLNDRADSRSLMDQGNFPLITIKNLKIEDSDTYICEVEDQKEVQL 120
Db 61 ILGNQGSFLTQGPSKLNDRADSRSLMDQGNFPLITIKNLKIEDSDTYICEVEDQKEVQL 120
Qy 121 LVFGLTANS DTHLLQGOSITLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Db 121 LVFGLTANS DTHLLQGOSITLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Qy 181 TWCTCTVLQNOKKVEFKIDIVLAFQKASSIYVKKEGEVESPFLAFTVEKLTGSGELMW 240
Db 181 TWCTCTVLQNOKKVEFKIDIVLAFQKASSIYVKKEGEVDFFSFLAFTVEKLTGSGELMW 240
Qy 241 QAERASSSKSWITTFDLKXKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOVAGSGLTLTA 300
Db 241 QAERASSSKSWITTFDLKXKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOVAGSGLTLTA 300
Qy 301 LEAKTGKGLHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPVVW 360
Db 301 LEAKTGKGLHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKLENKAKVSKREKAVVW 360
Qy 361 LNPEAGMMOCLLSDSGOVLLESNIKVLPTWSTPV 396
Db 361 LNPEAGMMOCLLSDSGOVLLESNIKVLPTWSTPV 396
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RESULT 42
5223418-2
; Patent No. 5223418
```

```
APPLICANT: ARCURI, EDWARD J.,BRANNER, MARY E.,DONOVAN, MARY
J.,GERBER, ROBERT G.,KELLER, JOHN A.
TITLE OF INVENTION: METHOD OF IMPROVING THE YIELD OF
HETEROLOGOUS PROTEINS PRODUCED BY STREPTOMYCES LIVIDANS
NUMBER OF SEQUENCES: 2
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/589,979
FILING DATE: 28-SEP-1990
SEQ ID NO:2
LENGTH: 394

Query Match      57.1%; Score 1951; DB 6; Length 394;
Best Local Similarity 97.5%; Pred. No. 4e-149;
Matches 384; Conservative 0; Mismatches 10; Indels 0; Gaps 0;

QY 1 MNRGVPFPHLLVLTALLPAATQGNKVLGKGGDTVELCTASQKSIQPHMKNNSQIK 60
DB 1 MNRGVPFPHLLVLTALLPAATQGNKVLGKGGDTVELCTASQKSIQPHMKNNSQIK 60
QY 61 ILNGSGFLTKGPSKLNDRADSRRLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILNGSGFLTKGPSKLNDRADSRRLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGILTANSDTHLLOGQSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGILTANSDTHLLOGQSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWCTCVLONOKKVEKIDIVLAFOKASSIYKKEGEQVEPSFLATFVEKLTGSGELMW 240
DB 181 TWCTCVLONOKKVEKIDIVLAFOKASSIYKKEGEQVEPSFLATFVEKLTGSGELMW 240
QY 241 QAERASSKSWITTFDLKNKEVSVKRVTODPKLQMGKKLPLHLTLPQALPOYAGSGNLTILA 300
DB 241 QAERASSKSWITTFDLKNKEVSVKRVTODPKLQMGKKLPLHLTLPQALPOYAGSGNLTILA 300
QY 301 LEAKTGKLGHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKEAVSKREKPYVW 360
DB 301 LGAKTGKLGHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKEAVSKREKAVNV 360
QY 361 LNPEAGMWQCLLSDSGVLLBSNITVLPTWSTPV 394
DB 361 KNPEAGMWQCLLSDSGVLLBSNIVLPTWSTPV 394

RESULT 43
US-08-236-311-4
Sequence 4, Application US/08236311
GENERAL INFORMATION:
APPLICANT: Capon, Daniel J.
APPLICANT: Gregory, Timothy J.
TITLE OF INVENTION: Adhesion Variants
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSSEE: Genentech, Inc.
STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: patin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/236,311
FILING DATE: 02-MAY-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/936190
FILING DATE: 26-AUG-1992
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/842777
FILING DATE: 18-FEB-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/250785
FILING DATE: 28-SEP-1988
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/104329
FILING DATE: 02-OCT-1987
ATTORNEY/AGENT INFORMATION:
NAME: Hasek, Janet E.
REGISTRATION NUMBER: 28,616
REFERENCE/DOCKET NUMBER: 444PIC2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/225-1896
TELEFAX: 415/952-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 434 amino acids
TYPE: amino acid
TOPOLOGY: linear

US-08-236-311-4
Query Match      55.8%; Score 1904; DB 1; Length 434;
Best Local Similarity 99.7%; Pred. No. 2.8e-145;
Matches 369; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 24 QGNRVVLGKGGDTVELCTASQKSIQPHMKNNSQIKILNGSGFLTKGPSKLNDRADSR 83
DB 56 QGNRVVLGKGGDTVELCTASQKSIQPHMKNNSQIKILNGSGFLTKGPSKLNDRADSR 115
QY 84 RSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVQLLVFGILTANSDTHLLOGQSITLT 143
DB 116 RSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVQLLVFGILTANSDTHLLOGQSITLT 175
QY 144 ESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLOKQKVEFKIDIVLA 203
DB 176 ESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLOKQKVEFKIDIVLA 235
QY 204 FOKASSIYKKEGEQVEPSFLATFVEKLTGSGELMWQAERASSKSWITTFDLKNKEVS 263
DB 236 FOKASSIYKKEGEQVEPSFLATFVEKLTGSGELMWQAERASSKSWITTFDLKNKEVS 295
QY 264 KRVTDPKLQMGKKLPLHLTLPQALPOYAGSGNLTILAFAKTLGKLGHOEVNLVVMRATQLO 323
DB 296 KRVTDPKLQMGKKLPLHLTLPQALPOYAGSGNLTILAFAKTLGKLGHOEVNLVVMRATQLO 355
QY 324 KNLTCEVWGPTSPKMLSLKENKEAVSKREKPYVWLNPEAGMWQCLLSDSGVLLBSN 383
DB 356 KNLTCEVWGPTSPKMLSLKENKEAVSKREKAVVWLNPEAGMWQCLLSDSGVLLBSN 415
QY 384 IKVLPTWSTP 393
DB 416 IKVLPTWSTP 425

RESULT 44
US-08-457-918-4
Sequence 4, Application US/08457918
GENERAL INFORMATION:
APPLICANT: Capon, Daniel J.
APPLICANT: Gregory, Timothy J.
TITLE OF INVENTION: Adhesion Variants
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSSEE: Genentech, Inc.
STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
```



```

? COMPUTER READABLE FORM:
? MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
? COMPUTER: IBM PC compatible
? OPERATING SYSTEM: PC-DOS/MS-DOS
? SOFTWARE: patin (genentech)
? CURRENT APPLICATION DATA:
?   APPLICATION NUMBER: US/08/457, 918
?   FILING DATE: 1-JUN-1995
? CLASSIFICATION: 435
? PRIOR APPLICATION DATA:
?   APPLICATION NUMBER: 08/236311
?   FILING DATE: 02-MAY-1994
? PRIOR APPLICATION DATA:
?   APPLICATION NUMBER: 07/936190
?   FILING DATE: 26-AUG-1992
? PRIOR APPLICATION DATA:
?   APPLICATION NUMBER: 07/842777
?   FILING DATE: 18-FEB-1992
? PRIOR APPLICATION DATA:
?   APPLICATION NUMBER: 07/250785
?   FILING DATE: 28-SEP-1988
? PRIOR APPLICATION DATA:
?   APPLICATION NUMBER: 07/104329
?   FILING DATE: 02-OCT-1987
? ATTORNEY/AGENT INFORMATION:
?   NAME: Kubinec, Jeffrey S.
?   REGISTRATION NUMBER: 36,575
?   REFERENCE/DOCKET NUMBER: P0444P1C3
? TELECOMMUNICATION INFORMATION:
?   TELEPHONE: 415/225-8228
?   TELEFAX: 415/952-9881
?   TELEX: 910/371-7168
? INFORMATION FOR SEQ ID NO: 4:
? SEQUENCE CHARACTERISTICS:
?     LENGTH: 434 amino acids
?     TYPE: amino acid
?     TOPOLOGY: linear
? JS-08-457-918-4

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Oy 386 VLPTWSTPEP 396
Db 361 VLPTWSTPEP 371

RESULT 46

US-08-808-374-1
; Sequence 1, Application US/08808374
; Patent No. 5961976
; GENERAL INFORMATION:
; APPLICANT: Wang, Chang Yi
; TITLE OF INVENTION: Antibody Against a Host Cell
; TITLE OF INVENTION: Antigen Complex for Pre- and Post-Exposure
; TITLE OF INVENTION: Protection from Infection by HIV Primary Isolates
; NUMBER OF SEQUENCES: 2
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Maria C.H. Lin
; STREET: 345 Park Avenue
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10154-0053
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version
; SOFTWARE: #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/808.374
; FILING DATE: 28-Feb-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/657,149
; FILING DATE: 03-June-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Maria C.H. Lin
; REGISTRATION NUMBER: 29,323
; REFERENCE/DOCKET NUMBER: 1151-4145
; TELEPHONE: (212)415-8745
; TELEFAX: (212)751-6849
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 433 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-808-374-1

Query Match 55.7%; Score 1901; DB 2; Length 433;

Best Local Similarity 99.2%; Pred. No. 4,9e-145; Indels 0; Gaps 0;

Matches 368; Conservative 1; Mismatches 2;

Oy 26 NKVVGKGGDTVELCTASQKKSIOFHMKNNSQIKILNQSFLTKGSKLNDRAISRSL 85
Db 1 NKVVGKGGDTVELCTASQKKSIOFHMKNNSQIKILNQSFLTKGSKLNDRAISRSL 60
Oy 86 LMDQNFPLIIKLNKLEISDITYICEVEDQKEVQLVFGLTANSPTHLLOQSLLTLES 145
Db 61 LMDQNFPLIIKLNKLEISDITYICEVEDQKEVQLVFGLTANSPTHLLOQSLLTLES 120
Oy 146 PGSSPSVQCSPPRKNIOGGKTLVSQLELODSGTWCTVLOKQKVEFKIDIVVLAFO 205
Db 121 PGSSPSVQCSPPRKNIOGGKTLVSQLELODSGTWCTVLOKQKVEFKIDIVVLAFO 180
Oy 206 KASIVYKKEGQVFSFPLAFTVEKLTGSGELMWAERASSSKSMITFDLKNKEVSVR 265
Db 181 KASIVYKKEGQVFSFPLAFTVEKLTGSGELMWAERASSSKSMITFDLKNKEVSVR 240
Oy 266 VTQDBKLOMGKKLPLHLTLPQALPOYAGSGNLTALAEKTKGLHOEVNLYVMRATOLQKN 325
Db 266 VTQDBKLOMGKKLPLHLTLPQALPOYAGSGNLTALAEKTKGLHOEVNLYVMRATOLQKN 325

Db 241 VTQDBKLOMGKKLPLHLTLPQALPOYAGSGNLTALAEKTKGLHOEVNLYVMRATOLQKN 300
Oy 326 LTCVWGPTSPKMLSLKLENKAKVSKREKPVVNLNPEAGMOCCLSDSGOVLLESNIK 385
Db 301 LTCVWGPTSPKMLSLKLENKAKVSKREKPVVNLNPEAGMOCCLSDSGOVLLESNIK 360
Oy 386 VLPTWSTPEP 396
Db 361 VLPTWSTPEP 371

RESULT 47

US-09-100-409A-1
; Sequence 1, Application US/09100409A
; Patent No. 6090388
; GENERAL INFORMATION:
; APPLICANT: Wang, Chang Yi
; TITLE OF INVENTION: PEPTIDE COMPOSITION FOR
; TITLE OF INVENTION: PREVENTION AND TREATMENT OF HIV INFECTION AND
; TITLE OF INVENTION: IMMUNE DISORDERS
; NUMBER OF SEQUENCES: 64
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MORGAN & FINNEGAN
; STREET: 345 Park Avenue
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10154-0054
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version
; SOFTWARE: #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/100.409A
; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME:
; REGISTRATION NUMBER:
; REFERENCE/DOCKET NUMBER: 1151-4154
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-758-4800
; TELEFAX: 212-751-6849
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 433 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-09-100-409A-1

Query Match 55.5%; Score 1896; DB 3; Length 433;

Best Local Similarity 99.2%; Pred. No. 1.2e-144; Indels 0; Gaps 0;

Matches 367; Conservative 1; Mismatches 2;

Oy 27 KVVVGKGGDTVELCTASQKKSIOFHMKNNSQIKILNQSFLTKGSKLNDRAISRSL 86
Db 2 KVVVGKGGDTVELCTASQKKSIOFHMKNNSQIKILNQSFLTKGSKLNDRAISRSL 61
Oy 87 WDOGNFPLIIKLNKLEISDITYICEVEDQKEVQLVFGLTANSPTHLLOQSLLTLES 146
Db 62 WDOGNFPLIIKLNKLEISDITYICEVEDQKEVQLVFGLTANSPTHLLOQSLLTLES 121
Oy 147 PGSSPSVQCSPPRKNIOGGKTLVSQLELODSGTWCTVLOKQKVEFKIDIVVLAFO 206
Db 122 PGSSPSVQCSPPRKNIOGGKTLVSQLELODSGTWCTVLOKQKVEFKIDIVVLAFO 181
Oy 207 ASSIVYKKEGQVFSFPLAFTVEKLTGSGELMWAERASSSKSMITFDLKNKEVSVR 266
Db 182 ASSIVYKKEGQVFSFPLAFTVEKLTGSGELMWAERASSSKSMITFDLKNKEVSVR 241

```
QY 267 TDDPKLQMGKKLPLHLTLPOALPOYAGSGNLTALBAKTGKLGHOEVNLVVMRATOLQKNL 326
| | | | |
DB 242 TDDPKLQMGKKLPLHLTLPOALPOYAGSGNLTALBAKTGKLGHOEVNLVVMRATOLQKNL 301
| | | | |
QY 327 TCEVMGPTSPKMLSLKLENKAKVSKREKPVVWVNLNPEAGMOCCLSDSGOVLLESNINIV 386
| | | | |
DB 302 TCEVMGPTSPKMLSLKLENKAKVSKREKPVVWVNLNPEAGMOCCLSDSGOVLLESNINIV 361
| | | | |
QY 387 LPTWSTPVEP 396
| | | | |
DB 362 LPTWSTPVEP 371
| | | | |

RESULT 48
5171838-13
; Patent No. 5171838
; APPLICANT: CHIBA, YUKINOBU
; TITLE OF INVENTION: LEU3A BINDING PEPTIDES
; NUMBER OF SEQUENCES: 24
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/526,921
; FILING DATE: 22-MAY-1990
; SEQ ID NO:13:
; LENGTH: 433
5171838-13

Query Match 49.9%; Score 1704; DB 6; Length 433;
Best Local Similarity 91.0%; Pred. No. 3.7e-129;
Matches 343; Conservative 7; Mismatches 13; Indels 14; Gaps 4;

QY 27 KVLGKGGDTVELTCTASOKKSIOPFMKNSNOIKILGNGSFLTKGSKLNDRAISRRS- 85
| | | | |
DB 2 KVLGKGGDTVELTCTASOKKSIOPFMKNSNOIKILGNGSFLTKGSKLNDRAISRRS 61
| | | | |
QY 86 -----LWDQGNFPLIINKLIEDSDTYICEVEDQKEEVQLLVFGLTANSPTHLLOQSGSL 139
| | | | |
DB 62 NOIKILGNKGSF-LTGKPSKLNDRADS-----RRSEEVQLLVFGLTANSPTHLLOQSGSL 114
| | | | |
QY 140 TLTLESPPSSPVQCRSPRKNIOGGKTLVSQLELQDSGTWCTVLONOKKVEFKIDI 199
| | | | |
DB 115 TLTLESPPSSPVQCRSPRKNIOGGKTLVSQLELQDSGTWCTVLONOKKVEFKIDI 174
| | | | |
QY 200 VVLAFOKASSIVYKKEGEVDFSPFLAFVTEKLTGSGELMWQABRASSSKSWITFDLKNK 259
| | | | |
DB 175 VVLAFOKASSIVYKKEGEVDFSPFLAFVTEKLTGSGELMWQABRASSSKSWITFDLKNK 234
| | | | |
QY 260 EYSVKRVTPDPLQMGKKLPLHLTLPOALPOYAGSGNLTALBAKTGKLGHOEVNLVVMRA 319
| | | | |
DB 235 EYSVKRVTPDPLQMGKKLPLHLTLPOALPOYAGSGNLTALBAKTGKLGHOEVNLVVMRA 294
| | | | |
QY 320 TLOLQKLTCEVMGPTSPKMLSLKLENKAKVSKREKPVVWVNLNPEAGMOCCLSDSGOVL 379
| | | | |
DB 295 TLOLQKLTCEVMGPTSPKMLSLKLENKAKVSKREKPVVWVNLNPEAGMOCCLSDSGOVL 354
| | | | |
QY 380 LESNIKVLPTWSTPVEP 396
| | | | |
DB 355 LESNIKVLPTWSTPVEP 371
| | | | |

RESULT 49
US-08-630-172-17
; Sequence 17, Application US/086301.72
; Patent No. 6060054
; GENERAL INFORMATION:
; APPLICANT: Staerz, Uwe
; TITLE OF INVENTION: NOVEL PRODUCT AND PROCESS FOR T
; TITLE OF INVENTION: LYMPHOCYTE VETO
; NUMBER OF SEQUENCES: 41
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sheridan Ross & McIntosh
; STREET: 1700 Lincoln Street, 35th Floor
; CITY: Denver
; STATE: Colorado
```

```

; COUNTRY: U.S.
; ZIP: 80203
; COMPUTER READABLE FORM:
; MEDIUM TYPE: floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/630,172
; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Connell, Gary J.
; REGISTRATION NUMBER: 32,020
; REFERENCE/DOCKET NUMBER: 2879-36
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (303) 863-9700
; TELEFAX: (303) 863-0223
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 410 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-630-172-17

Query Match 46.9%; Score 1599.5; DB 3; Length 410;
Best Local Similarity 54.0%; Pred. No. 9.2e-121;
Matches 325; Conservative 35; Mismatches 47; Indels 195; Gaps 6;

QY 26 NKVLGKGGDTVELTCTASOKKSIOPFMKNSNOIKILGNGSFLTKGSKLNDRAISRRS 85
| | | | |
DB 1 NKVLGKGGDTVELTCTASOKKSIOPFMKNSNOIKILGNGSFLTKGSKLNDRAISRRS 60
| | | | |
QY 86 LWDQGNFPLIINKLIEDSDTYICEVEDQKEEVQLLVFGLTANSPTHLLOQSGSLTLLES 145
| | | | |
DB 61 LWDQGNFPLIINKLIEDSDTYICEVEDQKEEVQLLVFGLTANSPTHLLOQSGSLTLLES 120
| | | | |
QY 146 PGGSSPVQCRSPRKNIOGGKTLVSQLELQDSGTWCTVLONOKKVEFKIDIYVLAFO 205
| | | | |
DB 121 PGGSSPVQCRSPRKNIOGGKTLVSQLELQDSGTWCTVLONOKKVEFKIDIYVLAFO 178
| | | | |
QY 206 KASSIVYKKEGEVDFSPFLAFVTEKLTGSGELMWQABRASSSKSWITFDLKNKEVSVKR 265
| | | | |
DB 179 ----- 178
| | | | |
QY 266 VTDDPKLQMGKKLPLHLTLPOALPOYAGSGNLTALBAKTGKLGHOEVNLVVMRATOLQKN 325
| | | | |
DB 179 ---EPR----- 181
| | | | |
QY 326 LTCEVMGPTSPKMLSLKLENKAKVSKREKPVVWVNLNPEAGMOCCLSDSGOVLLESNIK 385
| | | | |
DB 182 -----GPT----- 184
| | | | |
QY 386 VLPWSTPVEPKSCDKHTCP--CPAPELLGSPSVFLPPPKPQDTLMISRTPEVTCVVV 443
| | | | |
DB 185 -----IKP-----CPCKCPAPNLLGSPSVFLPPPKPQDTLMISRTPEVTCVVV 228
| | | | |
QY 444 DVSHEDPEVKENWYDGVVHNAKTKPREQYNSTYRVVSVLTVLHQDMLNGEKYCKVYS 503
| | | | |
DB 229 DVSHEDPDVQISWFPNNVEVHTAQOTQTHREDYNSLRVYSALPIQHODMWSGKEKCKVYN 288
| | | | |
QY 504 NKALPAPLEKTIISAKGQPREPOVYTLPPSDELTKNOVSLTCLVKGYPSPDIAVWESN 563
| | | | |
DB 289 NKDLPAPIERTISKPKGSVRAPOVYVLP--EEMTKQVTLTCVTFDMPEDIVYEMWNN 347
| | | | |
QY 544 GQPEKNYKTPPVLDSDGSFLYSKLTVDKSRMGOQGVFSCSWHGEALAHNYTQSLSLSS 623
| | | | |
DB 348 GKTBLNNTKTEPVLDSDGSYFMYSKLVKKNWVERNSYSCSVVHGEALAHNTTKSFRT 407
| | | | |
QY 624 PG 625
| |
DB 408 PG 409
```

```
RESULT 50
US-09-375-419-17
; Sequence 17, Application US/09375419
; Patent No. 6264950
; GENERAL INFORMATION:
; APPLICANT: Staerz, Uwe
; TITLE OF INVENTION: NOVEL PRODUCT AND PROCESS FOR T
; TITLE OF INVENTION: LYMPHOCYTE VETO
; NUMBER OF SEQUENCES: 41
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sheiridan Ross & McIntosh
; STREET: 1700 Lincoln Street, 35th Floor
; CITY: Denver
; STATE: Colorado
; COUNTRY: U.S.
; ZIP: 80203
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/375,419
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/630,172
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Connell, Gary J.
; REGISTRATION NUMBER: 32,020
; REFERENCE/DOCKET NUMBER: 2879-36
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (303) 863-9700
; TELEFAX: (303) 863-0223
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 410 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-375-419-17

Query Match      46.9%; Score 1599.5; DB 3; Length 410;
Beet Local Similarity 54.0%; Pred. No. 9,2e-121;
Matches 325; Conservative 35; Mismatches 47; Indels 195; Gaps 6;

QY      26 NKVVGGKGDVTELTCTASOKKSIOPHWNKSNQIKILNGSGFLTKGSKLNDRADSRRS 85
      1 NKVVGGKGDVTELTCTASOKKSIOPHWNKSNQIKILNGSGFLTKGSKLNDRADSRRS 60
QY      86 LMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVOLLVFGLTANSPTHLLOQSLLTLES 145
      61 LMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVOLLVFGLTANSPTHLLOQSLLTLES 120
QY      146 PGSSPSVOCSPRKNIOGGKTLVSQLELQDSTGTCVLOQNKKEFKIDIVVLAFO 205
      121 PGSSPSVOCSPRKNIOGGKTLVSQLELQDSTGTCVLOQNKKEFKIDIVVLA-- 178
QY      206 KASIVYKKEGQVBFSPFLAFTVEKLIGSGELMWQABRASSSKSWITFDLKNKEVSYKR 265
      179 ----- 178
QY      266 VTQDPKLOMGKKLPLHLTPQALPOYAGSGNLTALAEAKTGKLGQEVNLVVMRATQLOKN 325
      179 ---EPR----- 181
QY      326 LTCFVWGPTSPKLMSLKLENKAIVSKREKPVWVLANPEAGMWQCLLSDSGQVLLSNIK 385
      182 ---GPT----- 184
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QY      386 VLPTWSVPEBKSCDKHTHTCP--CPAPELLGGPSVFLFPKPKDITMISRTPEVTCVV 443
      185 -----IKP-----CPCKCPAPNLLGGPSVFLFPKPKDITMISRTPEVTCVV 228
QY      444 DVSHEDPEYKENWYVDGEVHNATKPREEOYNSTVYSLVTLHODMLNGKRYKCVS 503
      229 DVSEDDPDVQISWPNVNEVHTAQTQTHREDYNSRLVNSALPIQHDWMSGKEFKCVN 288
QY      504 NKALPAPIEKTSIAKQOPREPQVYTLPPSRDELTKQVSLTCVKGFPSPDIIVEMESN 563
      289 NKDLPAPIERTISKPKSVAPQVYVLPPE-EEMTKQVTLTCVTPDMPEDIVYEMTNN 347
QY      564 GQPENNYKTPPVVLDSDGSFFLYSKLTVDKSRWQOGVFCSVNHEALHNNHTQKSLSL 623
      348 GKTELANKTEPVLDSDGSYFMSKLRVEKKNWERNYSYSCSVVHEGLHNNHTKFSRRT 407
QY      624 PG 625
      408 PG 409
Db

RESULT 51
US-08-284-391B-33
; Sequence 33, Application US/08284391B
; Patent No. 5851828
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; APPLICANT: Banapour, Babak
; APPLICANT: Romeo, Charles
; APPLICANT: Kolanus, Waldemar
; TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/284,391B
; FILING DATE: 02-AUG-1994
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/195,395
; FILING DATE: 14-FEB-1994
; APPLICATION NUMBER: 07/847,566
; FILING DATE: 06-MAR-1992
; APPLICATION NUMBER: 07/665,961
; FILING DATE: 07-MAR-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Elbing, Karen L
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/247001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
; TELEX:
; INFORMATION FOR SEQ ID NO: 33:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 254 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-284-391B-33
```


Patent No. 5223394
APPLICANT: WALLNER, BARBARA
TITLE OF INVENTION: RECOMBINANT DNA MOLECULE COMPRISING
LYMPHOCYTE FUNCTION-ASSOCIATED ANTIGEN 3 PHOSPHATIDYLINOSITOL
LINKAGE SIGNAL SEQUENCE
NUMBER OF SEQUENCES: 12
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/335,688
FILING DATE: 10-APR-1989
SEQ ID NO: 9
LENGTH: 295

Query Match 39.9%; Score 1363; DB 6; Length 295;
Best Local Similarity 99.3%; Pred. No. 6,6e-102;
Matches 266; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 MNRGVFPHLLIVLQALIPAAATGKNVYLGKGDVTELTCTASQKSIQFHWKNSNQIK 60
DB 1 MNRGVFPHLLIVLQALIPAAATGKNVYLGKGDVTELTCTASQKSIQFHWKNSNQIK 60
QY 61 ILGNQSPFLTKGSPKLNDRSRSLMDQGNFLLIKNLKLEDSPTYICEVEDQKEEVL 120
DB 61 ILGNQSPFLTKGSPKLNDRSRSLMDQGNFLLIKNLKLEDSPTYICEVEDQKEEVL 120
QY 121 LVFGLTANSDDLLOGQSLTTLTLESPPGSSPSVQCRSPRGKNIQCGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDDLLOGQSLTTLTLESPPGSSPSVQCRSPRGKNIQCGKTLVSQLELDQSG 180
QY 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIVYKKEGEVSEFPLAFVTEKLTSGGELMW 240
DB 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIVYKKEGEVSEFPLAFVTEKLTSGGELMW 240
QY 241 QAERASSSKSWITTFDLKXKEVSVKRVQ 268
DB 241 QAERASSSKSWITTFDLKXKEVSVKRVQ 268

RESULT 55
US-09-313-942-8
Sequence 8, Application US/09313942
Patent No. 6472179
GENERAL INFORMATION:
APPLICANT: REGENERON PHARMACEUTICALS, INC.
TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
FILE REFERENCE: REG 203-A
CURRENT FILING DATE: 1999-05-19
PRIOR APPLICATION NUMBER: 09/313,942
PRIOR FILING DATE: 1999-05-19
PRIOR APPLICATION NUMBER: 60/101,858
PRIOR FILING DATE: 1998-09-25
NUMBER OF SEQ ID NOS: 32
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 8
LENGTH: 592
TYPE: PRT
ORGANISM: Homo sapiens
US-09-313-942-8

Query Match 38.7%; Score 1320; DB 4; Length 592;
Best Local Similarity 48.3%; Pred. No. 5,4e-98;
Matches 312; Conservative 53; Mismatches 161; Indels 120; Gaps 18;

QY 20 PAATGKNVYLGKGDVTELTCTASQ-KKSIQFHWKNSNQIKILGNQSPFLTKGSPKLN 78
DB 26 PAQEVARGVLSLPEDSVTLTCTGVEPEDNATVH-----VLKPKA----- 66
QY 79 RADSRRLMDQGNFLLIKNLKLEDSPTYICE-----VEDQKEEVLVFLGT 126
DB 67 -AGSHPSRWAGNRRLLRLRSVQLHDSGNVSCYRAGRPAQTVHLLVDVPEEPQLSCFRKS 125

QY 127 ANSDTHLLOGQSLTTLTLESPPGSSPSVQCRSPRGKNIQCGKTLVSQLELDQSGTWTCTV 186
DB 126 PLSN-----VCEMGWRSTPLTTKA-----VLLVRKQNSPADFPQPC 165
QY 187 LONOKKVEFKIDIVLAFQKASSIVYKKEGEVSEFPLAFVTEKLTSGGEL----- 238
DB 166 QYSESQKFSQCLAVPGDSSFYIVSMCVASSVSKSKTQTFQ---CGCLIQDPPANI 222
QY 239 -----W-----WOAERASSSKSW-ITFDELKXKEVSVKRVQDPELQWKKLPLHLT 283
DB 223 TWTAVANPRKLSWTWQDPHSHMNSFYRLRFLRYRAERSTFT-----TMVKKLQNHCV 278
QY 284 LPQALPQYAGSGNLTALAEKTKLHOEVLVNRATQLOKNTLCEVWGPTSPKMLSLK 343
DB 279 IH-----DAMSGLRH-----VQGR-----QEFQCGEWSPEAMGTPW 315
QY 344 LENK-----EAKVSKREKRVWVTLNPEAGMOCCLSDSQVLLIESIKVLPMTSTVEPSC 399
DB 316 TESRSPAEHEVS---TPMOALTTNKDDNLTLPDSD-----ANATSLPVQDAG-EPKSC 365
QY 400 DKHTCPCPAPBELLGGPSVFLPFPKPDLTMLISRTPEVTCVVVDVSHEDPEVKFNMYVD 459
DB 366 DKHTCPCPAPBELLGGPSVFLPFPKPDLTMLISRTPEVTCVVVDVSHEDPEVKFNMYVD 425
QY 460 GVEVHNAKTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETISKAK 519
DB 426 GVEVHNAKTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETISKAK 485
QY 520 GQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGOEENNYKTTTPVLD 579
DB 486 GQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGOEENNYKTTTPVLD 545
QY 580 DGSFPLSKLTVDSKRWQOGNVFSCVMEHRLNHYTKSLSPG 625
DB 546 DGSFPLSKLTVDSKRWQOGNVFSCVMEHRLNHYTKSLSPG 591

RESULT 56
US-09-499-846-2
Sequence 2, Application US/09499846
Patent No. 6656728
GENERAL INFORMATION:
APPLICANT: Kavanaugh et al.
TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
FILE REFERENCE: 035784/195012 (5784-
CURRENT APPLICATION NUMBER: US/09/499,846
CURRENT FILING DATE: 2000-02-07
NUMBER OF SEQ ID NOS: 12
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 2
LENGTH: 622
TYPE: PRT
ORGANISM: Homo sapiens
US-09-499-846-2

Query Match 37.8%; Score 1292; DB 4; Length 622;
Best Local Similarity 49.4%; Pred. No. 1e-95;
Matches 304; Conservative 47; Mismatches 117; Indels 148; Gaps 22;

QY 109 CEVEDQKEEVLVFGI-TANSDDLLOGQSLTTLTLESPPGSSPSVQCR-RSPRGK----- 161
DB 55 CRLLDDVQSLNWLARDGVLAESNRTLTGEVEVQ-DSVPADSLVACVTSPPGSDPTY 113
QY 162 ---NIQCKTLVSQLELDQSGT-----WTCVTLONOKKVEFKIDIVL 202
DB 114 FSVVNVSDALPSSBEDDDSSSEKETDNTKPNVAPVYT-----SPEKVEKTLHAV-- 166
QY 203 AFQKASSIVYKKEGEVSEFPLAFVTE-KLTGSGELMWQAERASSSKSWITTFDLKN-XE 260
DB 167 -----PAKTKVFKCPSSG-----TPNPTLRW-----LKNQKE 194
QY 261 VSVKRVQDPELQW---KKLPLHLTPQALPQYAGSGNLTALAEKTKLHOEVLN-V 315

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Db      195 FK-----PDHIGVYKRVATWMSIIMDSVP--SDKNYTCIVENEGSINH7QULV 245
Qy      316 VNRATO---LQKVL-----TCEWGPPTSPLKMLSKLE----- 345
Db      246 VERSPRPILQAGLPANKTVALGNSVEFMCKKYSDQPHIOMLKHEVNGSKIGPNLPY 305
Qy      346 ---NKEAKYSKREKPYWVLN-----PBAQMGCLISDS----- 375
Db      306 VOILKTAGVNTTDDKEVEHLNRVNSPEDAGEYTCLGNSITGSHSAMLTLEALEEPPA 365
Qy      376 ---GQVLESNIKVLPTWS--TP--VEPKSCDKHTPCPCPAPELLGSPVFLFPPPKXT 429
Db      366 VMTSPILYSRGGVLVRSGSSPGLQPKSGCDKHTPCPCPAPELLGSPVFLFPPPKXT 425
Qy      430 LMISRTPEVTCVVDVSHEDPEVKFMYVDGVEVHNNAKTKPREEOYNSTYRVSVLTVLH 489
Db      426 LMISRTPEVTCVVDVSHEDPEVKFMYVDGVEVHNNAKTKPREEOYNSTYRVSVLTVLH 485
Qy      490 ODMLNKEYCKKYSNKALPAPIEKTISKAGPREPOVYTLPPSRDELTKNOVSLTCLVK 549
Db      486 ODMLNKEYCKKYSNKALPAPIEKTISKAGPREPOVYTLPPSRDELTKNOVSLTCLVK 545
Qy      550 GFYPSDIAVEMESNGQPENNYKTPPVLDSDGSFLYSKLTVDKSRMGOGNVFSQVMHE 609
Db      546 GFYPSDIAVEMESNGQPENNYKTPPVLDSDGSFLYSKLTVDKSRMGOGNVFSQVMHE 605
Qy      610 ALHNYTQKSLSLSPG 625
Db      606 ALHNYTQKSLSLSPG 621

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RESULT 57

```

US-08-157-101A-7
; Sequence 7, Application US/08157101A
; Patent No. 5808032
; GENERAL INFORMATION:
; APPLICANT: KUBIHARA, TATSUYA
; APPLICANT: MATSUKURA, SHIGEKAZU
; APPLICANT: TSURUOKA, NOBUO
; APPLICANT: ARIMA, KENJI
; APPLICANT: NISHIHARA, TATSURO
; TITLE OF INVENTION: ANTI-HBc ANTIBODY GENES AND EXPRESSION
; TITLE OF INVENTION: PLASMIDS THEREFOR
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PILLSBURY, MADISON & SUTRO
; STREET: 1100 NEW YORK AVENUE, N.W.
; CITY: WASHINGTON
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/157,101A
; FILING DATE: 05-APR-1994
; CLASSIFICATION: 510
; ATTORNEY/AGENT INFORMATION:
; NAME: TITUS, MARLANA K
; REGISTRATION NUMBER: 35843
; REFERENCE/DOCKET NUMBER: 9437/204199
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-861-3711
; TELEFAX: 202-822-0944
; TELEX: 6714627 CUCH
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 459 amino acids
; TYPE: amino acid

```

```

; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-157-101A-7

```

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Query Match      37.7%; Score 1288.5; DB 1; Length 459;
Best Local Similarity 48.4%; Pred. No. 1.3e-95;
Matches 298; Conservative 38; Mismatches 91; Indels 189; Gaps 21;

```

```

Qy      25 GNKVVLGKKGDVETLCTAS--QKKSIOFHW-----KNSNOIKTL--GNQGSFL--TK 71
Db      17 GCGVV--QPGRLRLSCAASGFTFSSNSMHWRAQAPGGLGVAVILYDGNHKKFADSVK 74
Qy      72 GSKLNDRADSRSLMDQGNFPLIITKNIKIEDSDYICEVEHQKEVQLVLFVGLTANSOT 131
Db      75 GFTTIS--KNSKNITLY-----LEVKSLOTEDTGYYC--IRQO-----TYGV----- 113
Qy      112 HLLQ--GOSLTLTLESPPSSPSVQCRSPRGKNIQKGTLSVQLELQDSGTWCTVLQN 189
Db      114 HRFDMGCGTLVTVSSASTKGSVFPLAPSSKSTSG--TALAGL----- 157
Qy      190 QKKEVFKIDIVVLAFOKASSIVYKKEGQVEFSPFLAFTVEKLTSGSGELMGAERASSSK 249
Db      158 -----VKDYFPEPYTVS-----WNSGALASG- 178
Qy      250 SMITFDLNKKEVSVKRVYQDPKLGKGLPLHLTLPLQYAGSGNLTLALEATKGKLA 309
Db      179 -----VH--TEPAVL--OSSGLYSSSVTVTPSSSLG 206
Qy      310 QEVNLVWRATQLOQNLTCCEVWGPTSPKMLSLKLENKBAKYSKREKPYWVLNPEAGMW 369
Db      207 TQTYI-----CNV-----NHP----- 218
Qy      370 CLLSDGQVLESNIKVLPTWSTPVEPKSCDKHTTCPCPAPELLGSPVFLFPPPKXT 429
Db      219 -----SNRKV-----DKVEPKSCDKHTTCPCPAPELLGSPVFLFPPPKXT 262
Qy      430 LMISRTPEVTCVVDVSHEDPEVKFMYVDGVEVHNNAKTKPREEOYNSTYRVSVLTVLH 489
Db      263 LMISRTPEVTCVVDVSHEDPEVKFMYVDGVEVHNNAKTKPREEOYNSTYRVSVLTVLH 322
Qy      490 ODMLNKEYCKKYSNKALPAPIEKTISKAGPREPOVYTLPPSRDELTKNOVSLTCLVK 549
Db      323 ODMLNKEYCKKYSNKALPAPIEKTISKAGPREPOVYTLPPSRDELTKNOVSLTCLVK 382
Qy      550 GFYPSDIAVEMESNGQPENNYKTPPVLDSDGSFLYSKLTVDKSRMGOGNVFSQVMHE 609
Db      383 GFYPSDIAVEMESNGQPENNYKTPPVLDSDGSFLYSKLTVDKSRMGOGNVFSQVMHE 442
Qy      610 ALHNYTQKSLSLSPG 625
Db      443 ALHNYTQKSLSLSPG 458

```

RESULT 58

```

US-08-397-411-7
; Sequence 7, Application US/08397411
; Patent No. 6129914
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Gingrich, Roger
; APPLICANT: Link, Brian
; APPLICANT: Tso, J. Yun
; TITLE OF INVENTION: Bispesific Antibody Effective to Treat
; TITLE OF INVENTION: B-Cell Lymphoma and Cell Line
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew
; STREET: One Market Plaza, Stewart Tower, Suite 2000
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94105

```

```

1 COMPUTER READABLE FORM:
2
3 MEDIUM TYPE: Floppy disk
4
5 COMPUTER: IBM PC compatible
6
7 OPERATING SYSTEM: PC-DOS/MS-DOS
8
9 SOFTWARE: Patentln Release #1.0, Version #1.25
10
11 CURRENT APPLICATION DATA:
12
13 APPLICATION NUMBER: US/08/397,411
14
15 FILING DATE: 01-MAR-1995
16
17 CLASSIFICATION: 424
18
19 PRIOR APPLICATION DATA:
20
21 APPLICATION NUMBER: US 07/859,583
22
23 FILING DATE: 27-MAR-1992
24
25 ATTORNEY/AGENT INFORMATION:
26
27 NAME: Smith, William M.
28
29 REGISTRATION NUMBER: 30,223
30
31 REFERENCE/DOCKET NUMBER: 011823-004901
32
33 TELECOMMUNICATION INFORMATION:
34
35 TELEPHONE: 415-326-2400
36
37 TELEFAX: 415-326-2422
38
39 INFORMATION FOR SEQ ID NO: 7:
40
41 SEQUENCE CHARACTERISTICS:
42
43 LENGTH: 446 amino acids
44
45 TYPE: amino acid
46
47 STRANDEDNESS: single
48
49 TOPOLOGY: linear
50
51 MOLECULE TYPE: peptide
52
53 JS-08-397-411-7

```

Query Match	37.7%	Score 1286.5	DB 3	Length 446
Best Local Similarity	48.4%	Pred. No. 1.8e-95		
Matches 292		Conservative 33	Mismatches 103	Indels 175
				Gaps 14

```

QY 30 LGKGQJVELTCAQSKSIQF--HMKSNQIKILGNQGSFLTGPSPKIDNRADRSRL 86
Db 11 LVKPSLSTLTCTVSGFSGLTNVGVHMKVROSPEKGLEWIVGKMSGSGSTENAFISRLTIS 70
QY 87 --WQGNFPLIKNLTIEDSDTYICEVEDEQKEEVLVFGLTANSDFHLQ--GQSILTLT 142
Db 71 KQTSKNQVSLKUNSLRADTAVYYC-----ANDRADWYQGGLT 113
QY 143 LESPSSSPVQCRSPRGKNIQGGKTLVSQLELSDGTMCTVLQNKVFEKIDIVL 202
Db 114 VSSASTKSPVFPFLAPSSKSTSGG--TAALGCL-----144
QY 203 AFGKASIIYKKKEGEVFSFPLAFVVELTSSGELWMQARASSSKSWITFDLKNKEVS 262
Db 145 -----VKDYFPPEPVTVS-----NNSGALTSG-----165
QY 263 VKREVTDPKLQMGKRLPLHLTLPOALPOYAGSGNLTLLAEKTKLHQEVNLVVMRATOL 322
Db 166 -----VH-TFPAVL--GQSGIYLSISVVVTPSSSLGQTVI-----198
QY 323 QKQLTEWIGPITSPKMLSLSKLENKEAKVSKREKVVWVLNBPAGMOCCLSDSGVLLS 382
Db 199 -----CNV-----NHKP-----S 206
QY 383 NIKVLPWTSNPVEPKSCDKTHTCPCPPABELLGGSVFLPPPKPDITMTSRTPETVCV 442
Db 207 NTKV----DKQVPKSCDKTHTCPCPPABELLGGSVFLPPPKPDITMTSRTPETVCV 262
QY 443 VDVSHDEPVEKFWNYVDGVEVHNAKTPRREQYNSTYRVSVLTVLHQDMLNGKEYKCV 502
Db 263 VDVSHDEPVEKFWNYVDGVEVHNAKTPRREQYNSTYRVSVLTVLHQDMLNGKEYKCV 322
QY 503 SNKALPAPILEKITSKAKGQPREQVYTLPPSRDELTKNQVSLTCLYGCFYPSDIAYWES 562
Db 323 SNKALPAPILEKITSKAKGQPREQVYTLPPSRDELTKNQVSLTCLYGCFYPSDIAYWES 382
QY 563 NGQPENNYKTPPVLVSDSGSFFLYSLKLTVDKSRMQQGVNFGSCVWHEALYHNHYQKSL 622
Db 383 NGQPENNYKTPPVLVSDSGSFFLYSLKLTVDKSRMQQGVNFGSCVWHEALYHNHYQKSL 482
QY 623 SPG 625

```

```

DB          443 SPG 445

RESULT 59
US-09-499-846-6
; Sequence 6, Application US/09499846
; Patent No. 6656728
; GENERAL INFORMATION:
; APPLICANT: Kavanaugh et al.
; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
; TITLE OF INVENTION: RECEPTOR-IMMUNOGLOBULIN FUSION
; FILE REFERENCE: 035784/195012 (5784-
; CURRENT APPLICATION NUMBER: US/09/499,846
; CURRENT FILING DATE: 2000-02-07
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 497
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-499-846-6

```

Query Match	37.5%;	Score 1281.5;	DB 4;	Length 497;
Best Local Similarity	68.1%;	Pred. No. 5.3e-95;		
Matches 258;	Conservative 22;	Mismatches 53;	Indels 46;	Gaps 6;

```

QY      223 GSGNLTALAEKGTGLHC---EVLNVMRAOTQJRL--TCEVMGPTSKMLSLKLE-- 345
Db      118 GSINHTYQDLVVERSPHRRPILOAGLRPANTYALAGSIVMEKCYSDSPDHQIMLKAIENV 177
QY      346 -----NKEAKVSKREKRPVWYLN-----PEAGMOCILSDS-----GQ 377
Db      178 GSKIGPDMLPYVQILKTAGVMTTDEKEMETLHLRNVSFEDAGSYTCLAGSHHSAMWL 237
QY      378 VLLBSNIVLPTWSTPV-----EPKSCDKTHTCTPCRPAPRLGLGSPSYFLFPKP 426
Db      238 TVLEALIERPAPMVSPLYLESGSGPGLQEPKSCDTHCTPCRPAPRLGLGSPSYFLFPKP 297
QY      427 KDTLMISTRPEYTCVVVDVSHEDPEVKFMWYVDGYEVNNAKTRPREOYNSTRVVSYL 486
Db      298 KDTLMISTRPEYTCVVVDVSHEDPEVKFMWYVDGYEVNNAKTRPREOYNSTRVVSYL 357
QY      487 VLIHQDMLGKEVYCKVSKNKAIPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLT 546
Db      358 VLIHQDMLGKEVYCKVSKNKAIPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLT 417
QY      547 LVKGFYPSDDIAVEMESNQCPENNNTTTPPVLDSDGSFFLYSKLTVDSKRWQGNVSCSV 606
Db      418 LVKGFYPSDDIAVEMESNQCPENNNTTTPPVLDSDGSFFLYSKLTVDSKRWQGNVSCSV 477
QY      607 MHEALHNHYTQKSLSLSPG 625
Db      478 MHEALHNHYTQKSLSLSPG 496

```

```

? RESULT 60
? US-09-499-846--4
? , Sequence 4, Application US/09499846
? , Patent No. 6656728
? , GENERAL INFORMATION:
? , APPLICANT: Kavanaugh et al.
? , TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
? , TITLE OR INVENTION: RECEPTOR-IMMUNOGLOBULIN FUSION
? , FILE REFERENCE: 035784/195012 (5784-
? , CURRENT APPLICATION NUMBER: US/09/499,846
? , NUMBER OF SEQ. ID NOS: 12
? , SOFTWARE: FastSeq for Windows Version 3.0
? , SEQ ID NO. 4
? , LENGTH: 525
? , TYPE: PRT
? , ORGANISM: Homo sapiens

```


US-09-499-846-4

Query Match 37.5%; Score 1281.5; DB 4; Length 525;
 Best Local Similarity 68.1%; Pred. No. 5.7e-95;
 Matches 258; Conservative 22; Mismatches 53; Indels 46; Gaps 6;

```

QY 293 GSGNLTALAEATGKGLHQ---EVLNVMBATOLQKVL--TCEVWGPSTPKMLSLKLE-- 345
DB 146 GSINHTYQDVYBRSHRPILOAGLPANKTVALLGSVNEEMCKVYSDPOHIMLKHIEVN 205
QY 346 -----NKEAKVSKREKPVWVLN-----PEAGMOCCLSDS-----GQ 377
DB 206 GSKIGPDNLRYQILKTAGVNTTDKEMEVLHLRNVSFEDAGEYTCLAGNSIGLSHSAWL 265
QY 378 VLLESIIKILPTWSTV-----EPKSCDKHTTTPCPAPRLLGGSPVFLPPRP 426
DB 266 TYLEALERPAWMTSPLYLEGSGSPGLQEPKSCDKHTTTPCPAPRLLGGSPVFLPPRP 325
QY 427 KDTLMSRTPEVTCVVDVSHEDPEVKFMWYDGVENVNAKTKPREOYNSTYRVVSVLT 486
DB 326 KDTLMSRTPEVTCVVDVSHEDPEVKFMWYDGVENVNAKTKPREOYNSTYRVVSVLT 385
QY 487 VLHODMLNGKEYKCKVSNKALPAPIEKTISKAKGPREPOVYTLPPSRDELTKNOVSLTC 546
DB 386 VLHODMLNGKEYKCKVSNKALPAPIEKTISKAKGPREPOVYTLPPSRDELTKNOVSLTC 445
QY 547 LVKGFPSDIAVWESNGQPPENNYKTPPVLDSDGSFPLYSKLTVDKSRWQGNVPSGCV 606
DB 446 LVKGFPSDIAVWESNGQPPENNYKTPPVLDSDGSFPLYSKLTVDKSRWQGNVPSGCV 505
QY 607 MHEALHNHYTOKSLSPG 625
DB 506 MHEALHNHYTOKSLSPG 524

```

RESULT 61
 US-07-934-373C-22
 Sequence 22, Application US/07934373C

Patent No. 5821337
 GENERAL INFORMATION:
 APPLICANT: Paul J. Carter
 APPLICANT: Leonard G. Presta
 TITLE OF INVENTION: Immunoglobulin Variants
 NUMBER OF SEQUENCES: 48
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Genentech, Inc.
 STREET: 1 DNA Way
 CITY: South San Francisco
 STATE: California
 COUNTRY: USA
 ZIP: 94080
 COMPUTER READABLE FORM:
 MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: WinPacIn (Genentech)
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/07/934,373C
 FILING DATE: 21-Aug-1992
 CLASSIFICATION: 530
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: PCT/US92/05126
 FILING DATE: 15-JUN-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 07/715272
 FILING DATE: 14-JUN-1991
 ATTORNEY/AGENT INFORMATION:
 NAME: Lee, Wendy M.
 REGISTRATION NUMBER: 40,378
 REFERENCE/DOCKET NUMBER: P0709P2
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 650/225-1994
 TELEFAX: 650/952-9881

INFORMATION FOR SEQ ID NO: 22:

SEQUENCE CHARACTERISTICS:
 LENGTH: 454 amino acids
 TYPE: Amino Acid
 TOPOLOGY: Linear

Query Match 37.4%; Score 1278.5; DB 2; Length 454;
 Best Local Similarity 48.5%; Pred. No. 8.1e-95;
 Matches 293; Conservative 32; Mismatches 110; Indels 169; Gaps 15;

```

QY 30 LGKKDITVELCTAQQKSIQF--HKNSNQKILNGSGFLTK-GPSKLANDRAARSRL 86
DB 11 LVKPGASVAKISCKTSGYFTETMTMQSHGKSLKEMIGFPPKNGSSSHNRPMDKATL 70
QY 87 ---WDQGNFPLIKNLKIEDSDTYICEVEDOKEEVQLLVFGITANSDFHLQ--GQSITL 141
DB 71 AVDKSTAYMELRSLTSEDGIIYC-----ARMRLNYGFDVRYFDMGAGTTV 120
QY 142 TLESPPGSSPVQCSPPGKNIQGGKTLVSQLEIQDSGTWTCTYLQNKKEFKIDIVV 201
DB 121 TVSSASTKGPVSFPLAPSSKSTSG-TAALGCL----- 152
QY 202 LAFQKASSIVYKGEBOYEFSPFLAFTVEKLTGSGELMWQBARASSSKSWITFDLKNKEV 261
DB 153 -----VKDYFPEPVTVS-----INSGALTSG----- 173
QY 262 SVKRVTDPKLQMGKCLPLHLTLPOALPOYAGSNLTALAEKTKLHQEVNLVVMRAIQ 321
DB 174 -----VH-TFPAVL-QSSGLVSLSSVTVVPSSSLGTQTYI----- 206
QY 322 LQKULTCEWGPSTPKMLSLKLENKAKVSKREKPVWVLNPEAGMOCCLSDSQVLLLE 381
DB 207 -----CNV-----NHRP----- 213
QY 382 SNIKVLPMTSPFVPEPFGSCDKHTTTPCPAPRLLGGSPVFLPPPKDITLMSRTPEVTCV 441
DB 214 SNTKV-----DKVBEKSCDKHTTTPCPAPRLLGGSPVFLPPPKDITLMSRTPEVTCV 269
QY 442 VVDVSHEDPEVKFMWYDGVENVNAKTKPREOYNSTYRVVSVLTVLHODMLNGKEYCK 501
DB 270 VVDVSHEDPEVKFMWYDGVENVNAKTKPREOYNSTYRVVSVLTVLHODMLNGKEYCK 329
QY 502 VSNKALPAPIEKTISKAKGPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVWE 561
DB 330 VSNKALPAPIEKTISKAKGPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVWE 389
QY 562 SNGQPPENNYKTPPVLDSDGSFPLYSKLTVDKSRWQGNVPSGCVMHEALHNHYTOKSL 621
DB 390 SNGQPPENNYKTPPVLDSDGSFPLYSKLTVDKSRWQGNVPSGCVMHEALHNHYTOKSL 449
QY 622 LSPG 625
DB 450 LSPG 453

```

RESULT 62
 US-08-437-642B-22
 Sequence 22, Application US/08437642B

Patent No. 6054297
 GENERAL INFORMATION:
 APPLICANT: Paul J. Carter
 APPLICANT: Leonard G. Presta
 TITLE OF INVENTION: Immunoglobulin Variants
 NUMBER OF SEQUENCES: 47
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Genentech, Inc.
 STREET: 1 DNA Way
 CITY: South San Francisco
 STATE: California
 COUNTRY: USA
 ZIP: 94080
 COMPUTER READABLE FORM:

```

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatIn (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/437,642B
FILING DATE: 09-May-1995
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/934373
FILING DATE: 21-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/146206
FILING DATE: 17-NOV-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/05126
FILING DATE: 15-JUN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/715272
FILING DATE: 14-JUN-1991
ATTORNEY/AGENT INFORMATION:
NAME: Lee, Wendy M.
REGISTRATION NUMBER: 40,378
REFERENCE/DOCKET NUMBER: P0709P2C1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-1994
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 454 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
US-08-437-642B-22

```

Query Match 37.4%; Score 1278.5; DB 3; Length 454;

Best Local Similarity 48.5%; Pred. No. 8.1e-95; Indels 169; Gaps 15;

Matches 293; Conservative 32; Mismatches 110;

```

30 LGKKGDVTELTCTASQKSIQF--HWKNSNOIKILGNQGSFLTK-GPSKLNDRADSRSL 86
11 LVRPASVAKISCKTSKGTFTFETVHMNMKSHGKSLHMGFNPKNGGSSHHQRFMDKATL 70
87 ---WDQGNPFLIINLKIEDSDTYICEVEDQKEEVQLLVFGILTANSDTHLIQ--GQSILTL 141
71 AVDKSTAYMELRLSTEDSGIYYC-----ARMRGILNGFDVRYFDVWGAGTTV 120
142 TLESPPGSSPSVQCSRGNKIQGGKTLVSQLELDSDGTCTCVLQNKQKVEFKIDIV 201
121 TVSSASTKGSVPFPLAPSSKSTSGG-TAALGCL----- 152
202 LAFQASISIVYKKEGEQVEFPLAFTVEKLTGSGELMWQARASSSKSWITFDLKNKEV 261
153 -----VKDYFPEPVYVS-----MNSGALITSG----- 173
262 SVKRVTDPKLQWKGKLPMLHTLPQALPOYAGSGLTLALEAKTGKHQEVNLVVMRATQ 321
174 -----VH--TFPAVL--QSSGLYSLSSVTVWSSSLGTQYI----- 206
322 LQKNLTCEVWGPTSPKMLMLSLKLENKEAKVSKREKPVAVNLPEAGMQLSDSGQVLE 381
207 -----CNV-----NHRP----- 213
382 SNIKVLPTWSTFVEPKSCDHTHTCPCPAPPELLGSPVFLPPPKKDTLMTSRPEVTCV 441
214 SNTKV---DKKVEKSCDKHTHTCPCPAPPELLGSPVFLPPPKKDTLMTSRPEVTCV 269
442 VVDVSHEDPEVKFNYYVDGVEVHNAKTRPREQVNSTYRVVSVLTVLHODMLNGKEYKX 501
270 VVDVSHEDPEVKFNYYVDGVEVHNAKTRPREQVNSTYRVVSVLTVLHODMLNGKEYKX 329
502 VSNKALPAPIEKTISKAGQPREPOVYTLTPSRBDLTKNQVSLTLVVGFTPSDIAVWME 561
330 VSNKALPAPIEKTISKAGQPREPOVYTLTPSRBEMTNQVSLTCLVVGFTPSDIAVWME 389

```

```

562 SNGQENNNYKTPPEVLDSGSPFLYSKLTVDKSRMQGNVPSGCVMEALHNHYTKSLS 621
390 SNGQENNNYKTPPEVLDSGSPFLYSKLTVDKSRMQGNVPSGCVMEALHNHYTKSLS 449
622 LSPG 625
450 LSPG 453

```

RESULT 63

US-08-146-206C-22

Sequence 22, Application US/08146206C

Patent No. 6407213

GENERAL INFORMATION:

APPLICANT: Carter, Paul J.

APPLICANT: Presta, Leonard G.

TITLE OF INVENTION: Method for Making Humanized Antibodies

NUMBER OF SEQUENCES: 26

CORRESPONDENCE ADDRESS:

ADDRESSEE: Genentech, Inc.

STREET: 1 DNA Way

CITY: South San Francisco

STATE: California

COUNTRY: USA

ZIP: 94080

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: WinPatIn (Genentech)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/146,206C

FILING DATE: 17-No. 6407213-1993

CLASSIFICATION: 530

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/715272

FILING DATE: 14-JUN-1991

ATTORNEY/AGENT INFORMATION:

NAME: Lee, Wendy M.

REGISTRATION NUMBER: P0709P1

REFERENCE/DOCKET NUMBER: P0709P1

TELECOMMUNICATION INFORMATION:

TELEPHONE: 650/225-1994

TELEFAX: 650/952-9881

INFORMATION FOR SEQ ID NO: 22:

SEQUENCE CHARACTERISTICS:

LENGTH: 454 amino acids

TYPE: Amino Acid

TOPOLOGY: Linear

US-08-146-206C-22

Query Match 37.4%; Score 1278.5; DB 4; Length 454;

Best Local Similarity 48.5%; Pred. No. 8.1e-95; Indels 169; Gaps 15;

Matches 293; Conservative 32; Mismatches 110;

```

30 LGKKGDVTELTCTASQKSIQF--HWKNSNOIKILGNQGSFLTK-GPSKLNDRADSRSL 86
11 LVRGASVAKISCKTSKGTFTFETVHMNMKSHGKSLHMGFNPKNGGSSHHQRFMDKATL 70
87 ---WDQGNPFLIINLKIEDSDTYICEVEDQKEEVQLLVFGILTANSDTHLIQ--GQSILTL 141
71 AVDKSTAYMELRLSTEDSGIYYC-----ARMRGILNGFDVRYFDVWGAGTTV 120
142 TLESPPGSSPSVQCSRGNKIQGGKTLVSQLELDSDGTCTCVLQNKQKVEFKIDIV 201
121 TVSSASTKGSVPFPLAPSSKSTSGG-TAALGCL----- 152
202 LAFQASISIVYKKEGEQVEFPLAFTVEKLTGSGELMWQARASSSKSWITFDLKNKEV 261
153 -----VKDYFPEPVYVS-----MNSGALITSG----- 173
262 SVKRVTDPKLQWKGKLPMLHTLPQALPOYAGSGLTLALEAKTGKHQEVNLVVMRATQ 321

```

[illegible]

RESULT 64
 US-09-705-686-22
 Sequence 22, Application US/09705686
 Parent No. 6639055
 GENERAL INFORMATION:
 APPLICANT: Carter, Paul J.
 Preste, Leonard G.
 TITLE OF INVENTION: Method for Making Humanized Antibodies
 NUMBER OF SEQUENCES: 26
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Genentech, Inc.
 STREET: 1 DNA Way
 CITY: South San Francisco
 STATE: California
 COUNTRY: USA
 ZIP: 94080
 COMPUTER READABLE FORM:
 MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: WinPatIn (Genentech)
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/705,686
 FILING DATE: 02-No. 6639055-2000
 CLASSIFICATION: <Unknown>
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 08/146206
 FILING DATE: 17-NOV-1993
 APPLICATION NUMBER: 07/715272
 FILING DATE: 14-JUN-1991
 ATTORNEY/AGENT INFORMATION:
 NAME: Lee, Wendy M.
 REGISTRATION NUMBER: 40,378
 REFERENCE/DOCKET NUMBER: P0709PID3
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 650/225-1994
 TELEFAX: 650/952-9881
 INFORMATION FOR SEQ ID NO: 22:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 454 amino acids
 TYPE: Amino Acid
 TOPOLOGY: Linear
 SEQUENCE DESCRIPTION: SEQ ID NO: 22:
 US-09-705-686-22

	Query Match	37.4%; Score 1278.5; DB 4; Length 454;
	Best Local Similarity	48.5%; Pred. No. 8.le-95;
	Matches 293; Conservative	32; Mismatches 110; Indels 169; Gaps 15
<hr/>		
Oy	30 LGKKDVTVELCTTSOKKSIOF--HWKNSNOIKILGNOSFLTK-GPSKLNDRADRSRL	86
Db	11 LVKGASVFKLSCKTSGTYFTFEYTHMMKQSHGKSLFWJGFNFPKNKGSSHNORFMDAKL	70
Oy	87 ---WDQGNFPLIINKLKIEDSDTYICEVEDOKEVEQLLVFGILTANSDPHLLO--GQSLLT	141
Db	71 AVDKSTAYVELRSLTSEDSGIYYC-----AARGLINYGFDVRYPDWAGATTV	120
Oy	142 TLESPPSSPVQGRSPRKNIIOGKLTLSQLELDSDGTWTCYLQNKVKYEFIDIVV	201
Db	121 TVSASTKGPSVFPLAPSSKSTGG-TDALCL-----	152
Oy	202 LAFOKASSIYKKEGEQVESFPPLAFYTEKLTGSSELWMOAERASSSKSWITFDLKNREV	261
Db	153 -----VKDYFFPEPVYS-----MNGGALTSG-----	173
Oy	262 SVKRVTDPKLQMGSKLP.LHLTLFOALPOYAGSNLTALBAKTGKLHOEVNLVVMRATQ	321
Db	174 -----VH-TFPAVL-QSSGLYSLSIVTVSPSSLGTOYI-----	206
Oy	322 LQKRLTEYWGPTSPKMLSLKENKAKEYSKREKRPVVVNLPBAGMOCCLSDSCGVILLE	381
Db	207 -----CNV-----NHKP-----	213
Oy	382 SNIKVLPTWSPTPEPKSCDHTHTCPCPAPELILGSPSYFLPFPKPKDTLMTSRTEPYTCV	441
Db	214 SNTKV---DKVPPKSCDKHTHTPCPCAPPELLGGPSF.LPFPKPKDTLMTSRTEPYTCV	269
Oy	442 VVDVSHDEPVEKFNMYYDVGVENNAKTKPREEOYNSTYRVVS.VLTVLHQDWLNGKEYCK	501
Db	270 VVDVSHDEPVEKFNMYYDVGVENNAKTKPREEOYNSTYRVVS.VLTVLHQDWLNGKEYCK	329
Oy	502 VSNNALPAPIFKTISKAKGOREEQYVTLTPRSBELTNQVSLTCLVGVGPSDIAVEME	561
Db	330 VSNNALPAPIFKTISKAKGOREEQYVTLTPRSBELTNQVSLTCLVGVGPSDIAVEME	389
Oy	562 SNGOPENNKYKTPPVLDSDGSFFLYSKLTVXSKPMOQGNVSSCVMEHALNHYTOKSL	621
Db	390 SNGOPENNKYKTPPVLDSDGSFFLYSKLTVXSKPMOQGNVSSCVMEHALNHYTOKSL	449
<hr/>		
Oy	622 LSPG 625	
Db	450 LSPG 453	
<hr/>		
RESULT 65		
PCT-US93-07832-22		
Sequence 22, Application PC/TUS9307832		
GENERAL INFORMATION:		
APPLICANT: Genentech, Inc.		
TITLE OF INVENTION: Immunoglobulin Variants		
NUMBER OF SEQUENCES: 40		
CORRESPONDENCE ADDRESS:		
ADDRESSEE: Genentech, Inc.		
STREET: 460 Point San Bruno Blvd		
CITY: South San Francisco		
STATE: California		
COUNTRY: USA		
ZIP: 94080		
COMPUTER READABLE FORM:		
MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk		
COMPUTER: IBM PC compatible		
OPERATING SYSTEM: PC-DOS/MS-DOS		
SOFTWARE: patin (Genentech)		
CURRENT APPLICATION DATA:		
APPLICATION NUMBER: PCT/US93/07832		
FILING DATE: 19930820		
CLASSIFICATION:		
PRIOR APPLICATION DATA:		

```

/ APPLICATION NUMBER: 07/715272
/ FILING DATE: 14-JUN-1991
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: PCT/US92/05126
/ FILING DATE: 15-JUN-1992
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 07/934373
/ FILING DATE: 21-AUG-1992
/ ATTORNEY/AGENT INFORMATION:
/ NAME:
/ REGISTRATION NUMBER:
/ REFERENCE/DOCKET NUMBER: 709P2PCT
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE:
/ TELEFAX: 415/952-9881
/ TELE: 910/371-7168
/ INFORMATION FOR SEQ ID NO: 22:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 454 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ PCT-US93-07832-22

```

```

Query Match      37.4%; Score 1278.5; DB 5; Length 454;
Best Local Similarity 48.5%; Pred. No. 8,1e-95;
Matches 293; Conservative 32; Mismatches 110; Indels 169; Gaps 15;

OY 30 LGKKDGYELCTAOKKSIQF--HWKNSNQIKLGNQGSFLTK-GPEKLNDRADRSRL 86
DB 11 LVKPGASVKISCKTGYTFTETMTMMQSHGKSLFEMIGFPRKGGSHNRFPDKRTL 70
OY 87 ---WDQGNFPLIKNLKIEDSDTYICEVEDQEVQLLVFGILTANSDTHLQ--GQS/LTL 141
DB 71 AVDKSTAYMELRSLTSEDGIIYCC-----ARMRLGVDFVRFDVWGAGRTV 120
OY 142 TLSPGSSPSVQVCSPPKGNKIQGCKTSLVSQLELDSDGTCTCTVLQNKVEFKIDLV 201
DB 121 TVSSASTGKPSVFLPAPSSKSTSGG-TAALGCL----- 152
OY 202 LAFQKASISIVYKKEGQVEFSPPLAFVTEKLTGSGELMWQAEARASSSKSWITFDLNKEV 261
DB 153 -----VKDYFPEPVTVS-----WNSGALTSG----- 173
OY 262 SVKRVYTOPKLQWKKLPLHLTLTLPQALPQYAGSGNLTLAEKTKGKHQEVNLVVMRATQ 321
DB 174 -----VH--TFPAVL--QSSGLYSLSSVVTVPPSSSLGTQTYI----- 206
OY 322 LQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVWVNLPEAGMQCLLSDGQVLE 381
DB 207 -----CNV-----NHRP----- 213
OY 382 SNIKLPTWSPFVPEKSCDKTHTCPCPAPELLGGPSVFLPFPKPKDTLMTSRPEVTCV 441
DB 214 SNTKV-----DKVPEKSCDKTHTCPCPAPELLGGPSVFLPFPKPKDTLMTSRPEVTCV 269
OY 442 VDVSHEDPEVKFNMYVDGVEVNAKTKPREBOYNSTYRVVSVLTVLHQDLNMGKEYCK 501
DB 270 VDVSHEDPEVKFNMYVDGVEVNAKTKPREBOYNSTYRVVSVLTVLHQDLNMGKEYCK 329
OY 502 VSNKLLPAPIEKTISKAKGQPREPOVYTLPPSRDLTKNOVSLTLVYGFPYPSDIAVME 561
DB 330 VSNKLLPAPIEKTISKAKGQPREPOVYTLPPSRDLTKNOVSLTLVYGFPYPSDIAVME 389
OY 562 SNGQENNYKTTTPVLDSGFFLYSKLTVDSKRMQGNVFCSSVMHEALNHNHYTQKSL 621
DB 330 SNGQENNYKTTTPVLDSGFFLYSKLTVDSKRMQGNVFCSSVMHEALNHNHYTQKSL 449
OY 622 LSPG 625
DB 450 LSPG 453

```

RESULT 66

```

US-09-049-672A-4
/ Sequence 4, Application US/09049672A
/ Patent No. 6135941
/ GENERAL INFORMATION:
/ APPLICANT: Hillman, Jennifer L.
/ APPLICANT: Lal, Preeti
/ APPLICANT: Tang, Y. Tom
/ APPLICANT: Yue, Henry
/ APPLICANT: Au-Young, Janice
/ APPLICANT: Corley, Neil C.
/ APPLICANT: Guegler, Karl J.
/ APPLICANT: Baughn, Marian R.
/ TITLE OF INVENTION: HUMAN IMMUNE SYSTEM ASSOCIATED PROTEINS
/ NUMBER OF SEQUENCES: 28
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Incyte Pharmaceuticals, Inc.
/ STREET: 3174 Porter Drive
/ CITY: Palo Alto
/ STATE: CA
/ COUNTRY: USA
/ ZIP: 94304
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Diskette
/ OPERATING SYSTEM: DOS
/ SOFTWARE: FastSeq for Windows Version 2.0
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/049,672A
/ FILING DATE: HERewith
/ CLASSIFICATION: 536
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER:
/ FILING DATE:
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Ceirone, Michael C
/ REGISTRATION NUMBER: 39,132
/ REFERENCE/DOCKET NUMBER: PP-0497 US
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 650-855-0555
/ TELEFAX: 650-845-4166
/ TELEX:
/ INFORMATION FOR SEQ ID NO: 4:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 473 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ IMMEDIATE SOURCE:
/ LIBRARY: PANCYTUT01
/ CLONE: 1513264
/ US-09-049-672A-4

Query Match      37.4%; Score 1277.5; DB 3; Length 473;
Best Local Similarity 46.9%; Pred. No. 1e-94;
Matches 296; Conservative 37; Mismatches 125; Indels 173; Gaps 15;

OY 8 RHLILVQLALLP-----AATQGNKVVLGKKDGYELCTAS--QKKSIOFHKNSNOI 59
DB 2 KHLWFLILVAAPRWVLSQVQLQESGPGIVKPSSETLTLCVSGSITSGGYVSWIRQP 61
OY 60 KIILNQ--GSFLTKGPEKLNDRADRSRL---WDQGNFPLIKNLKIEDSDTYICEVEDQ 114
DB 62 PGKLEWIGIYVYSGSTLYNPISLRSVTISVDTSKNOFSLKLSSTVADTVAVVYCARD 120
OY 115 KEVQLLVFGILTANSDTHLQGGSLTLTSPSSSPSVQCRSPRGKNIQGKTLVSQ 174
DB 121 -----VGLRGANVMQVGGSTLVTSASATKGPSVFPPLAPSSKSTSGG-TAALGCL 171
OY 175 ELQDSGTWCTVLQNKVEFKIDIVLAFQKASISIVYKKEGQVEFSPPLAFVTEKLTG 234
DB 172 -----VKDYFPEPVTVS----- 183
OY 235 SGELMWQAEARASSSKSWITFDLNKEVSVKRVYTOPKLQWKKLPLHLTLQALPQYAGS 294

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[illegible]

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RESULT 67
US-09-590-656-2
; Sequence 2, Application US/09590656
; Patent No. 641932
; GENERAL INFORMATION:
; APPLICANT: Cerretti, Douglas P.
; APPLICANT: Borges, Luis G.
; APPLICANT: Fanslow, III, William C.
; TITLE OF INVENTION: TEK ANTAGONISTS
; FILE REFERENCE: 2900-A
; CURRENT APPLICATION NUMBER: US/09/590,656
; CURRENT FILING DATE: 2000-06-07
; PRIOR APPLICATION NUMBER: 60/137,889
; PRIOR FILING DATE: 1999-06-07
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 704
; TYPE: PR1
; ORGANISM: Homo sapiens
; US-09-590-656-2

```

	Query Match	37.4%	Score 1277	DB 4	Length 704
	Best Local Similarity	84.1%	Pred. No. 26-94		
	Matches	244	Conservative	9	Mismatches 13, Indels 24, Gaps 4
Qy	360	VLANPAGMOCILSD-SCQVLIENSI--KVLDP-----TWSPV--E	395		
Db	414	ILPPSGVWVSVNVAGVWEKFNISVYLKPLNAPVVIDTGHFAVINISSEPFGE	473		
Qy	396	PKSCDKHTPCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVK	455		
Db	474	PKSCDKHTPCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVK	533		
Qy	456	WYVDGVEVHNAKTKRREQDYNSTYRVVSVLTVLHDQMLNKGKKYCKCKVSKALPAPIEKTI	515		
Db	534	WYVDGVEVHNAKTKRREQDYNSTYRVVSVLTVLHDQMLNKGKKYCKCKVSKALPAPIEKTI	593		
Qy	516	SKAKQPREPQVYTLPPSRDELTKQVSLTCLVKGFPYPSDIAVWESNQSPENNAKTTTP	575		
Db	594	SKAKQPREPQVYTLPPSRDEMTKQVSLTCLVKGFPYPSDIAVWESNQSPENNAKTTTP	653		
Qy	576	VLDISGSEFLYSKLTVDKSRWQGVVFGCSVNHKALAHNYTKQSLSLSPG	625		
Db	654	VLDISGSEFLYSKLTVDKSRWQGVVFGCSVNHKALAHNYTKQSLSLSPG	703		

```

RESULT 68
US-09-733-764-2
; Sequence 2, Application US/09733764
; Patent No. 6521424
; GENERAL INFORMATION:
; APPLICANT: Cerretti, Douglas P.
; APPLICANT: Borges, Luis G.
; APPLICANT: Fanslow, III, William C.
; TITLE OF INVENTION: TEK ANTAGONISTS
; FILE REFERENCE: 2900-A
; CURRENT APPLICATION NUMBER: US/09/733,764
; CURRENT FILING DATE: 2000-12-07
; PRIOR APPLICATION NUMBER: 09/590,656
; PRIOR FILING DATE: 1999-06-07
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 704
; TYPE: prt
; ORGANISM: Homo sapiens
US-09-733-764-2

```

	Query Match	37.4%	Score 1277;	DB 4;	Length 704;		
	Best Local Similarity	84.1%;	Pred. No. 2e-94;				
	Matches	244;	Conservative	9;	Mismatches	13;	
				Indels	24;	Gaps	4
Qy		360	VLANEAGMOCLELD-SGOVLLAESNI--KVLPR-----TWSTPV--E	395			
Dd		414	ILPPDSGVMCSVNTVAGMEKPENISKVLPKPLANPNVIDTGHNPVINIISSEPTGYGE	473			
Qy		396	PKSCDKHTHCPCPAPELIGSPVFLEPPPKCDITMI SRTEBVT CVVDVSHEDEEVKN	455			
Dd		474	PKSCDKHTHCPCPAPELIGSPVFLEPPPKKDITMISRTEBVT CVVDVSHEDEEVKN	533			
Qy		456	WYVDGVVEHNAKTPREBOYNSTRVVSVLTVLVHQDMLNGEKYCKVKSNKLPAPIEKT	515			
Dd		534	WYVDGVVEHNAKTPREBOYNSTRVVSVLTVLVHQDMLNGEKYCKVKSNKLPAPIEKT	593			
Qy		516	SKAGQGRREPQVYTLPPSRDELITNQVSLTCLVNGFYPSSDLAVDMESGGQEPNNYKTRP	575			
Dd		594	SKAGQGRREPQVYTLPPSRREMTNQVSLTCLVNGFYPSDLAVDMESGGQEPNNYKTRP	653			
Qy		576	VLDSDGSFPFLYSKLTVDKSRMQGNVNSCSVMHEALNHNHYOKSLSPG	625			
Dd		654	VLDSDGSFPFLYSKLTVDKSRMQGNVNSCSVMHEALNHNHYOKSLSPG	703			

```

1 RESULT 69
2 US-08-470-299--4
3 ; Sequence 4, Application US/08470299
4 ; Patent No. 5783181
5 ; GENERAL INFORMATION:
6 ; APPLICANT: Browne, Michael J.
7 ; APPLICANT: Murphy, Kay E.
8 ; APPLICANT: Chapman, Conrad G.
9 ; APPLICANT: Clinkenbeard, Helen E.
10 ; APPLICANT: Young, Peter R.
11 ; APPLICANT: Shaltzman, Allan R.
12 ; TITLE OF INVENTION: No. 5783181el Compounds
13 ; NUMBER OF SEQUENCES: 21
14 ; CORRESPONDENCE ADDRESS:
15 ; ADDRESSEE: Smithkline Beecham Corporation
16 ; STREET: 709 Swedeland Road, P.O. Box 1539
17 ; CITY: King of Prussia
18 ; STATE: Pennsylvania
19 ; COUNTRY: USA
20 ; ZIP: 19406
21 ; COMPUTER READABLE FORM:
22 ; MEDIUM TYPE: Floppy disk
23 ; COMPUTER: IBM PC compatible
24 ; OPERATING SYSTEM: PC-DOS/MS-DOS

```

SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/470,299
FILING DATE: 06-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Sutton, Jeffrey A.
REGISTRATION NUMBER: 34,028
REFERENCE/DOCKET NUMBER: P31005C3
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-270-5024
TELEFAX: 610-270-5090
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 387 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
US-08-470-299-4

Query Match 37.4%; Score 1275.5; DB 1; Length 387;
Best Local Similarity 85.2%; Pred. No. 1,1e-94;
Matches 241; Conservative 13; Mismatches 18; Indels 11; Gaps 2;

QY 351 VSRKRPVWVNPBAGMMQCLSDSGQVLLSNIKVLPT-----WSTPYEPKSCDKT 402
DB 107 LKRLDRNLIMGL---AGLNSCPYKEANQSTLENFLERLKTIMREKDSKSSGTEPKSADKT 163
QY 403 HTCPCPAPBELLGSGSVFLFPKPKPDITLMISTPRTVCVVVDVSHEDDEVKKNWVVDGVE 462
DB 164 HTCPCPAPBELLGSGSVFLFPKPKPDITLMISTPRTVCVVVDVSHEDDEVKKNWVVDGVE 223
QY 463 VHNATKREBEOYNSTYRVSVLTVLHODMLNGEKYCKVSNKALPAPLEKTIKAKGQP 522
DB 224 VHNATKREBEOYNSTYRVSVLTVLHODMLNGEKYCKVSNKALPAPLEKTIKAKGQP 283
QY 523 REPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMESNGQPNNTKTPPVLDSDGS 582
DB 284 REPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMESNGQPNNTKTPPVLDSDGS 343
QY 583 PFLYSKLTVDKSRMOQGNVFCSSVMHEALHNHYTQKSLSLSPG 625
DB 344 PFLYSKLTVDKSRMOQGNVFCSSVMHEALHNHYTQKSLSLSPG 386

RESULT 70
US-09-301-593-18
Sequence 18, Application US/09301593A
Patent No. 6455677
GENERAL INFORMATION:
APPLICANT: Park, John E.
APPLICANT: Garin-Chesa, Pilar
APPLICANT: Bamberger, Uwe
APPLICANT: Leger, Olivier
APPLICANT: Saldanha, Jose W.
APPLICANT: Rettig, Wolfgang J.
TITLE OF INVENTION: FAP-specific Antibody with Improved Producibility
FILE REFERENCE: 0653.1890001
CURRENT APPLICATION NUMBER: US/09/301,593A
CURRENT FILING DATE: 1999-04-29
EARLIER APPLICATION NUMBER: EP 98107925.4
EARLIER FILING DATE: 1998-04-30
EARLIER APPLICATION NUMBER: US 60/086,049
EARLIER FILING DATE: 1998-05-18
NUMBER OF SEQ ID NOS: 108
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 18
LENGTH: 453
TYPE: PRT
ORGANISM: Homo sapiens
US-09-301-593-18

Query Match 37.4%; Score 1275.5; DB 4; Length 453;

Best Local Similarity 47.8%; Pred. No. 1.4e-94;
Matches 289; Conservative 39; Mismatches 107; Indels 169; Gaps 16;

QY 30 LGKKDTELTCTASQKSIQF--HMKNSNQIKILNGQSGF-LTKGPSKLNDRADSRSL 86
DB 10 LVKPGASVMSCKTSRTFTFTYTHWROSHGKLEMTGGINPNNGKIPNTQKRGKATL 69
QY 87 W---DQGNFLLINKLIEDSDTYICEVEDQKEEVQLLVFGLTANSDTHLQ--GQSLTL 141
DB 70 TVKSSSTAYMELASLSEDSAVYFC-----ARRIANGY--DEGHANDVQGGTSV 119
QY 142 TLESPPGSSPSVQCRSRGKRIQGGKTLVSQLELDQSGTWCTIVLQNKVEKIDIV 201
DB 120 TVSSASTKGPSVFPPLADSSKSTSG--TAAIGCL----- 151
QY 202 LAFQKASSIVYKKGGEQVEFPLAFIVKELTSGSGELMOMERASSSKSWITFDLKNKEV 261
DB 152 -----VKDYFPEPVTVS-----MNSGALTSG----- 172
QY 262 SVKRVTDPKLQMGKLLPLHLTPQALPOYAGSGLTLALEAKTGKLGHEVNLVWMEATQ 321
DB 173 -----VH-TFPAVL-QSGSLVLSVTVVPSSISLGTQTYI----- 205
QY 322 LQKNLTCEWGPSTSPKMLSLKENKAKVSKREKPYWVNPBAGMMQCLSDSGQVLL 381
DB 206 -----GNV-----NHKP----- 212
QY 382 SNIKVLPWTSNPVEPKSCDKHTPCPCAPBELLGSGSVFLFPKPKDITLMISTPRTVCV 441
DB 213 SNTKY---DKVPPKSCDKHTPCPCAPBELLGSGSVFLFPKPKDITLMISTPRTVCV 268
QY 442 VVDVSHEDPEVKFMVYDGVGVHNATKPREBOYNSTYRVSVLTVLHODMLNGEKYCK 501
DB 269 VVDVSHEDPEVKFMVYDGVGVHNATKPREBOYNSTYRVSVLTVLHODMLNGEKYCK 328
QY 502 VSNKALPAPLEKTIKAKGQPREQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEME 561
DB 329 VSNKALPAPLEKTIKAKGQPREQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEME 388
QY 562 SNGQPNNTKTPPVLDSDGSFFLYSKLTVDKSRMOQGNVFCSSVMHEALHNHYTQKSL 621
DB 389 SNGQPNNTKTPPVLDSDGSFFLYSKLTVDKSRMOQGNVFCSSVMHEALHNHYTQKSL 448
QY 622 LSPG 625
DB 449 LSPG 452

RESULT 71
US-09-740-002-25
Sequence 25, Application US/09740002
Patent No. 6537809
GENERAL INFORMATION:
APPLICANT: BRAMS, PETER
APPLICANT: MORROW, PHILLIP
TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES
TITLE OF INVENTION: SPECIFIC TO REV F-PROTEIN AND METHODS FOR THEIR
TITLE OF INVENTION: MANUFACTURE AND THERAPEUTIC USE THEREOF
FILE REFERENCE: 037003-0275759
CURRENT APPLICATION NUMBER: US/09/740,002
CURRENT FILING DATE: 2000-12-20
PRIOR APPLICATION NUMBER: 09/335,697
PRIOR FILING DATE: 1999-06-18
PRIOR APPLICATION NUMBER: 08/488,376
PRIOR FILING DATE: 1995-06-07
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 25
LENGTH: 475
TYPE: PRT
ORGANISM: Homo sapiens
US-09-740-002-25

Query Match 37.4%; Score 1275.5; DB 4; Length 475;
Best Local Similarity 46.8%; Pred. No. 1.5e-94;
Matches 298; Conservative 35; Mismatches 111; Indels 193; Gaps 16;

10 LLLVLLALLPALTQGNKVLGKKDVELTCTAS-----QKSIQFHWK 54
10 LVAVATRVLSQVQLQSSGPVAVKPTETLTCTVSGFSLNPMGVATWRQPGKALEV- 68
55 NSNQIKILGN-----GSPFLTKGPKLNDRAISRSLMDGNPPLIHKLIKEDSDTYIC 109
69 -----LGNISSEDEKSPSLSKRLTTSQDTSRS-----QVLSLTNVDPVDTATATYC 116
110 EVEDQKEEVLAVFGLTANSDFHL-LQGQSLTLTLSPSSPSVOCSPRGNIQGGKT 168
117 -----ARVGLYDINAYVLYLDYWGQGTLTVTVSASATKGSVPLPASSSTSGG-T 167
169 LSVSQLELDQSDGWTCTVLAQKQKFKIDIVLAQKASSIYKKKEGEOVEPSPLPAT 228
168 AALGCL-----VXQYFPEPYT 183
229 VEKLTGSGELMWAERASSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPLAL 288
184 VS-----WNSGALTSG-----VH-TTPAVL 202
289 PQVAGSGNLTALAEATGKLDQEVNLVVMRATOLQKLTCEVWGPTSPKMLSLKLENKE 348
203 -GSSGLYLSAVTVTPSSSLGTQTYI-----CNV----- 230
349 AKVSKREKPVVNLNPAQMWQCLLSDGOVLESNIKVLPTWSTPVEPKSCDKHTTCTPC 408
231 -----NHKP-----SNTKV-----DKKAEPKSCDKHTTCTPC 257
409 PABELLGSPSVFLFPPPKDPTLMISRTPEYTCVAVVSHEDPEVKRWVVDGVEVNAKT 468
258 PABELLGSPSVFLFPPPKDPTLMISRTPEYTCVAVVSHEDPEVKRWVVDGVEVNAKT 317
469 KPREEQNSTYRVVSVLTVLHODMLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVY 528
318 KPREEQNSTYRVVSVLTVLHODMLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVY 377
529 TLPPSDELTKQVSLTCLVKGFPYDPDIAVEMESNQEPENNYKTPPVLDSDGSFPLYSK 588
378 TLPPSDELTKQVSLTCLVKGFPYDPDIAVEMESNQEPENNYKTPPVLDSDGSFPLYSK 437
589 LTVDKSRMQGNVFCSCVMHEALHNHYTKSLSLSPG 625
438 LTVDKSRMQGNVFCSCVMHEALHNHYTKSLSLSPG 474

RESULT 72
US-08-472-888A-7
Sequence 7, Application US/08472888A
GENERAL INFORMATION:
APPLICANT: Seed, Brian
TITLE OF INVENTION: ACP-ANTIBODY FUSION PROTEINS
TITLE OF INVENTION: AND RELATED MOLECULES AND METHODS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Clark & Elding LLP
STREET: 176 Federal Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/472,888A

FILING DATE: 07-JUN-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/618,314
FILING DATE: 23-NOV-1990
ATTORNEY/AGENT INFORMATION:
NAME: Elding, Karen L.
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/258001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045
TELEX:
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 442 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-472-888A-7

Query Match 37.3%; Score 1275; DB 4; Length 442;
Best Local Similarity 93.3%; Pred. No. 1.5e-94;
Matches 218; Conservative 3; Mismatches 14; Indels 0; Gaps 0;

371 LLSDSGQVLESNIKVLPTWSTPVEPKSCDKHTTCTPCPAPRLGSPVFLFPPPKDPTL 430
187 VLGSSGLVLSVTVTPSSSDKRVKPCDKHTTCTPCPAPRLGSPVFLFPPPKDPTL 246
431 MISRTPEYTCVAVVSHEDPEVKRWVVDGVEVNAKTKPREEQNSTYRVVSVLTVLHQ 490
247 MISRTPEYTCVAVVSHEDPEVKRWVVDGVEVNAKTKPREEQNSTYRVVSVLTVLHQ 306
491 DWLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVYG 550
307 DWLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVYG 366
551 FPPSDIAVEMESNQEPENNYKTPPVLDSDGSFPLYSKLTVDKSRMQGNVFCSCVMHEA 610
367 FPPSDIAVEMESNQEPENNYKTPPVLDSDGSFPLYSKLTVDKSRMQGNVFCSCVMHEA 426
611 LHNHYTKSLSLSPG 625
427 LHNHYTKSLSLSPG 441

RESULT 73
PCT-US96-10043-9
Sequence 9, Application PC/TUS9610043
GENERAL INFORMATION:
APPLICANT: The General Hospital Corporation
TITLE OF INVENTION: P-SELECTIN LIGANDS AND RELATED MOLECULES
TITLE OF INVENTION: AND METHODS
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02210-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/000,213

```

1      FILING DATE: 14-JUN-1995
2      CLASSIFICATION:
3      ATTORNEY/AGENT INFORMATION:
4      NAME: Leech, Karen F.
5      REGISTRATION NUMBER:
6      REFERENCE/DOCKET NUMBER: 00786/284001
7      TELECOMMUNICATION INFORMATION:
8      TELEPHONE: 617/542-5070
9      TELEFAX: 617/542-8906
10     TELEX: 200154
11     INFORMATION FOR SEQ ID NO: 9:
12     SEQUENCE CHARACTERISTICS:
13     LENGTH: 442 amino acids
14     TYPE: amino acid
15     STRANDEDNESS: not relevant
16     TOPOLOGY: linear
17     MOLECULE TYPE: protein
18       

19     CTT-0596-10043-9

```

Query March	37.3%	Score 1275;	DB 5;	Length 442;
Best Local	93.3%	Pred. No. 1.5e-94;		
Matches 238;	Conservative	3;	Mismatches 14;	Indels 0;
				Gaps 0

[illegible]

```

RESULT 74
US-09-740-002-27
Sequence 27, Application US/09740002
Patent No. 6537809
GENERAL INFORMATION:
APPLICANT: BRAMS, PETER
APPLICANT: MORROW, PHILIP
TITLE OF INVENTION: NEURALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES
TITLE OF INVENTION: SPECIFIC TO RSV F-PROTEIN AND METHODS FOR THEIR
TITLE OF INVENTION: MANUFACTURE AND THERAPEUTIC USE THEREOF
FILE REFERENCE: 037003-0275759
CURRENT APPLICATION NUMBER: US/09/740,002
CURRENT FILING DATE: 2000-12-20
PRIOR APPLICATION NUMBER: 09/335,697
PRIOR FILING DATE: 1999-06-18
PRIOR APPLICATION NUMBER: 08/488,376
PRIOR FILING DATE: 1995-06-07
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 27
LENGTH: 475
TYPE: PRT
ORGANISM: Homo sapiens
US-09-740-002-27

```

Query Match	37.3%	Score	1272.5	DB	4	Length	475
Best Local Similarity	46.2%	Pred. No.	2.6e-94				
Matches	295	Conservative	31	Mismatches	116	Indels	197
						Gaps	15

Oy	10	ILBLVGLATLPAATOGNKVYLAKKGDYELCTASQKKSIOFHWNKSNOJLILCNOGFL	69
Db	10	LVAVARVLSQVQLODSEPALVKPPIQYTLITCTIS-----GFSLSTRMSVNM	58
Oy	70	TKGSPSLND--RADSRLSDQGNF-----PLIINKLIEDSDT	106
Db	59	RQPGKALFWLARID-----WDDDFGASLKTRLSLSKDTSKNQVILRMNVDPVDAT	113
Oy	107	YICEVDEQKEVQQLVFGLTANSDPHLLOGSLTLTLESPPGSSPSVQCSPRKXNOGG	166
Db	114	YFCARASLYDSFYLF-----YHAWGGTJVATVTSASATKGPVSFPLAPSSKTSGG	166
Oy	167	KTLVSQELTODSGTWTCTVLQNGKQVFEKIDIVLAFQKASIVYKKEGEOVEFSPLA	226
Db	167	-TAAIDCL-----VADYPER	181
Oy	227	FVYEKLTSGGELMWOAERASSKSNITPDLKNKEVSVKRYTQDPLQNGKKLPLHLTLPO	286
Db	182	VTVS-----VNSGALTSG-----VH-TFPA	200
Oy	287	ALPQVAGSNTLTALAEAKTQKLDHGVNLVWRATQLOKNLTCVWGPSTSPKLMSTLEN	346
Db	201	VL-QSSGLVSLSSVTVPSSSLGTYI-----CNV-----	230
Oy	347	KEAKVSKREKPYVNLNPEAGMQCULSDSGVLTLESNIKVLPTWSTPYEPCSDCTHTCP	406
Db	231	-----NHKP-----SNTKV-----DKAEPKSCDKHTCP	255
Oy	407	PCPAPELLGSPVFLFPPEPKDITLMSITRPEYTCVVDVSHEDPEVKFNNYVDGVEVHNA	466
Db	256	PCPAPELLGSPVFLFPPEPKDITLMSITRPEYTCVVDVSHEDPEVKFNNYVDGVEVHNA	315
Oy	467	KTPREEOYNSTRVYVSVTLVTHQOMLNGKEKCCVNSKALPAPIEKTISAKAQPREPO	526
Db	316	KTPREEOYNSTRVYVSVTLVTHQOMLNGKEKCCVNSKALPAPIEKTISAKAQPREPO	375
Oy	527	VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNQGPENNYKTPPVLDSDGSFFLY	586
Db	376	VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNQGPENNYKTPPVLDSDGSFFLY	435
Oy	587	SKLTVDKSRMOQGNVPSGCVGHEALAHNNYTKSLSLSPG	625
Db	436	SKLTVDKSRMOQGNVPSGCVGHEALAHNNYTKSLSLSPG	474

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/ RESULT 75
/ US-08-227-496C-15
/ Sequence 15, Application US/08227496C
/ Patent No. 6130202
/ GENERAL INFORMATION:
/ APPLICANT: Greve, Jeffrey M.
/ APPLICANT: Mclelland, Alan
/ TITLE OF INVENTION: Multimeric Forms of
/ TITLE OF INVENTION: Rhinovirus Receptor
/ NUMBER OF SEQUENCES: 20
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Bayer Corporation
/ STREET: 400 Morgan Lane
/ CITY: West Haven
/ STATE: Connecticut
/ COUNTRY: USA
/ ZIP: 06516
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: diskette, 1.44 MB storage
/ COMPUTER: Dell Optiplex GXL
/ OPERATING SYSTEM: Windows 95
/ SOFTWARE: Wordperfect 8.0 for Windows
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/227,496C
/ FILING DATE: 04/14/94
/ CLASSIFICATION: 51A
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 07/903,069
/

```


/ FILING DATE: 06/22/92
/ APPLICATION NUMBER: 07/704,984
/ FILING DATE: 05/24/91
/ APPLICATION NUMBER: 07/556,238
/ FILING DATE: 07/20/90
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Barbara A. Shlmei
/ REGISTRATION NUMBER: 29,862
/ REFERENCE/DOCKET NUMBER: MTI 214.2C
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (203) 812-2786
/ TELEFAX: (203) 812-5492
/ INFORMATION FOR SEQ ID NO: 15:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 680 amino acid residues
/ TYPE: amino acids
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ DESCRIPTION: protein
/ HYPOTHEICAL: no
/ FRAGMENT TYPE: complete sequence
/ FEATURE:
/ NAME/KEY: tICAM(185)/IgG fusion protein
/ OTHER INFORMATION: amino acid residues 1-453 =
/ OTHER INFORMATION: tICAM(453); amino acid residues 454-680 = amino
/ OTHER INFORMATION: acid residues 216-442 of human IgG1 heavy chain
US-08-227-496C-15

Query Match 37.3%; Score 1272.5; DB 3; Length 680;
Best Local Similarity 51.9%; Pred. No. 4,4e-94;
Matches 290; Conservative 44; Mismatches 114; Indels 111; Gaps 17;
QY 99 LKIEDSDTYICEVEDQKEEVQLLVFGL--TANSDTLLQGSQTLTLSPSSPSVQCR 156
DB 200 LEVDYTGCTVCSID-----GLFVSEAQVHLALGDOFL-----NPTV--- 236
QY 157 SPRGNKIOGGKTLVSLELDQSGT--WTCTVLQNKQVEFKIDIVLAFOKASSIVYKK 214
DB 237 -TYGNDTSFSAKA-SVS-VTAEDGTQRLTCVILVNGSQETLTQVITYSPAPNVILTPR 293
QY 215 EGEQVEFSPPLATTEKLTGSGELMWOAERASSKSWITFDLKNKESYK-----RYT 267
DB 294 EVSE-----GTEVTVKCEAHPRAKYT 314
QY 268 QD--PKLQMGKULPLHLPLQALPOYAG--SGNLTLALEAKTGKHOEVNLVVMARQL 322
DB 315 LNVGPAPQISPPRAQL--LTKATPEONGSFCSCATLEVAGQILHNQVRELVLGPRLL 371
QY 323 -----OKNLTCSEVWGPSTPRLMLSLKLENKEAKVSKREKRPVWVLNPEAGM 367
DB 372 DERDCGNMTWPNENSQOTPMQAMGNPLBELK-CLNDGTFPLPILG---ESVTVTRDLBGT 427
QY 368 MQC-LISDSGQVLLSESNIKVLPWSTPVEBKSCDKTHTCPCPAPELLGSPVFLPPKP 426
DB 428 YLCRASTQGEVTRKTVNVL-----SPRYEDKTHTCPCPAPELLGSPVFLPPKP 480
QY 427 KDTLMSRPEVYCVVVDVSHEDPEVKFMVYDGVVHNAKTKPREQVNSTYRVVSVLT 486
DB 481 KDTLMSRPEVYCVVVDVSHEDPEVKFMVYDGVVHNAKTKPREQVNSTYRVVSVLT 540
QY 487 VLHQDLNKGKEYCKVSNKALPAPIEKTSKAKGQPREPOVYTLPPSRBELTNGQVSLTC 546
DB 541 VLHQDLNKGKEYCKVSNKALPAPIEKTSKAKGQPREPOVYTLPPSRBELTNGQVSLTC 600
QY 547 LVKGFPSPDIAYWESNGQPENNYKTPPVLDGSGFFLYSKULTVDKSMQOQNVFSCV 606
DB 601 LVKGFPSPDIAYWESNGQPENNYKTPPVLDGSGFFLYSKULTVDKSMQOQNVFSCV 660
QY 607 MHEALNNHYTKQSLSLSPG 625
DB 661 MHEALNNHYTKQSLSLSPG 679

RESULT 76
US-08-487-550-12
; Sequence 12, Application US/08487550
; Patent No 6113898
; GENERAL INFORMATION:
; APPLICANT: Anderson, Darrell R.
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
; TO HUMAN B7.1 AND/OR B7.2 PRIATIZED FORMS THEREOF,
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
; STREET: 699 Prince Street
; CITY: Alexandria
; STATE: VA
; COUNTRY: USA
; ZIP: 22314
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/487,550
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Teskin, Robin L.
; REGISTRATION NUMBER: 35,030
; REFERENCE/DOCKET NUMBER: 012712-131
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6620
; TELEFAX: 703-836-2021
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 476 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-487-550-12
Query Match 37.2%; Score 1270; DB 3; Length 476;
Best Local Similarity 54.6%; Pred. No. 4,2e-94;
Matches 281; Conservative 31; Mismatches 86; Indels 117; Gaps 14;
QY 171 VSQLELDQSG-----TWCTVLQNKQVEFKIDIVLAFOKASSIVYKKEGOYE 220
DB 18 ISQVQLQSSGPGLVYKPSSETLSLTCAV-----SGGSIS 49
QY 221 EEPFLATVEKLTGSGELMWOAERASSKSWITFDLKNKESYKRVYQDPLQMGKULPL 280
DB 50 GGYGNGW-IROPDGLGWMIGSFYSSGNTYVNPGLKS-QVYIS--TTSKNQFSILKL-- 103
QY 281 HLTLPQALPOYAGSNLTALAE---KTGKHOEVNLVVMARATOLQNLTCSEVWGP--- 333
DB 104 -----NSMTAAADYAVYCYVRDLFSVGVNVY-----NNPFVWVGPRVL 141
QY 334 -----TSPKLMLSLKLENKEAKVSKR-----EKPVV-----LNPEAGMQC 370
DB 142 VTVSSASTGSPGVFLPAPSSKSTSGTAAAGCLVYDPEPEPTVAMNSGALLTSGVTPRA 201
QY 371 LISDSGQVLLSE-----NIKLPWSTPVP---EPKSCDKTHTCPCPAPA 410
DB 202 VLSQSGVLSLSVTVTPSSISLOTQYICNVNHPK-NRTKVAKAPKSCDKTHTCPCPAPA 260
QY 411 PELLGSPVFLPPPKDTLMSRPEVYCVVVDVSHEDPEVKFMVYDGVVHNAKTKP 470
DB 261 PELLGSPVFLPPPKDTLMSRPEVYCVVVDVSHEDPEVKFMVYDGVVHNAKTKP 320
QY 471 REEQVNSTYRVVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKTSKAKGQPREPOVYTL 530
DB 321 REEQVNSTYRVVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKTSKAKGQPREPOVYTL 380

```

OY 531 PPSRDELTKNOVSLTCLVKGFYPSDIAVEMESNQGPENNYKTTTPVLDSGSPFLYSKLT 590
    |||||
DB 381 PPSRDELTKNOVSLTCLVKGFYPSDIAVEMESNQGPENNYKTTTPVLDSGSPFLYSKLT 440
OY 591 VDKSRMOQGNVFSQVMEHALHNHYTKQSLSLSPG 625
    |||||
DB 441 VDKSRMOQGNVFSQVMEHALHNHYTKQSLSLSPG 475

RESULT 77
US-09-526-098-12
; Sequence 12, Application US/09526098
; Patent No. 6492134
; GENERAL INFORMATION:
; APPLICANT: Anderson, Darrell R.
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
; TITLE OF INVENTION: IMMUNOSUPPRESSANTS"
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
; STREET: 699 Prince Street
; CITY: Alexandria
; STATE: VA
; COUNTRY: USA
; ZIP: 22314
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/526,098
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/383,916
; FILING DATE:
; APPLICATION NUMBER: US 08/487,550
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Teskin, Robin L.
; REGISTRATION NUMBER: 35,030
; REFERENCE/DOCKET NUMBER: 012712-131
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6620
; TELEFAX: 703-836-2021
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 476 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-09-526-098-12

Query Match 37.2%; Score 1270; DB 4; Length 476;
Best Local Similarity 54.6%; Pred. No. 4,2e-94;
Matches 281; Conservative 31; Mismatches 86; Indels 117; Gaps 14;

OY 171 VSQLELDPSG-----TWCTVLNQKKVEFKIDIVLAFQKASSIYKKEGEQVE 220
    |||||
DB 18 LSQVQLDSSGPGSLVAPSETLSITCAV-----SGGIS 49
OY 221 FSPFLATVEKLTGSGELMWAERASSSKSWITFDLKNKEVSVKKTODPKLQMGKLP 280
    |||||
DB 50 GGYGGMW-IRQPPGKGLWIGSFGSSGNTYVNPGLKS-QVTIS--TDSKNQPSLKL- 103
OY 281 HTLPQALPQYAGSGNLTALAE---KTGKLHDEVNLVWRAIQLQKMLCEVWGP-- 333
    |||||
DB 104 -----NSMTAAADTAAYVYCVRRDLFSVVGMY-----NMFDVWGPVL 141

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OY 334 -----TSPKMLSLKLENKEAKVSKR-----EKPVWV-----LNPEAGMOC 370
    |||||
DB 142 VTYSASTKQPSVFPLAPSSKSTSGCTAAAGCLVKQYFPEPVYTMNAGLSGTHFEPA 201
OY 371 LLSDSGVLLLES-----NITKLPWTSTPV-----EPKSCDKTHICPPCPA 410
    |||||
DB 202 VLQSSGLYSLSSTVTVPSSSLGTQTYLCNVNHRK--NTKVDKKAEPKSCKTHICPPCPA 260
OY 411 PELLGSPVFLFPPPKDQTLMTISRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTKP 470
    |||||
DB 261 PELLGSPVFLFPPPKDQTLMTISRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTKP 320
OY 471 REQYNSTYRVSVLTALHQMNLNGEKYCKVSKNALPAIEKTISSAKQPREPQVYTL 530
    |||||
DB 321 REQYNSTYRVSVLTALHQMNLNGEKYCKVSKNALPAIEKTISSAKQPREPQVYTL 380
OY 531 PPSRDELTKNOVSLTCLVKGFYPSDIAVEMESNQGPENNYKTTTPVLDSGSPFLYSKLT 590
    |||||
DB 381 PPSRDELTKNOVSLTCLVKGFYPSDIAVEMESNQGPENNYKTTTPVLDSGSPFLYSKLT 440
OY 591 VDKSRMOQGNVFSQVMEHALHNHYTKQSLSLSPG 625
    |||||
DB 441 VDKSRMOQGNVFSQVMEHALHNHYTKQSLSLSPG 475

RESULT 78
US-09-499-846-12
; Sequence 12, Application US/09499846
; Patent No. 6656728
; GENERAL INFORMATION:
; APPLICANT: Kavanaugh et al.
; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
; TITLE OF INVENTION: RECEPTOR-IMMUNOGLOBULIN FUSION
; FILE REFERENCE: 035784/195012 (5784-
; CURRENT APPLICATION NUMBER: US/09/499,846
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 488
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-499-846-12

Query Match 37.2%; Score 1270; DB 4; Length 488;
Best Local Similarity 69.2%; Pred. No. 4.3e-94;
Matches 256; Conservative 22; Mismatches 55; Indels 37; Gaps 6;

OY 293 GSGNLTALBAKTKGLHQ---EVLNVWRAIQLQKML--TCEVWGPTSPKMLSLKLE-- 345
    |||||
DB 118 GSIHNTYQLDVERSPHRIPLIGLPAKNTVALGSNVFEMCKVSDPQPHIQLKHIEVN 177
OY 346 -----NKEAKVSKREKPVWVNL-----PEAGMOCGLSDS-----GQ 377
    |||||
DB 178 GSKIGDNLPPVQILKTAGVNTTDKEMEVHLNRVSEDEAGBYTCLAGNSIGLSHSAWL 237
OY 378 VLESNTIKVLPWTSTP--VEPKSCDKTHICPPCAPELGSPSVFLFPPPKDQTLMTISRT 435
    |||||
DB 238 TVLEALERAIVAWTSPILYLEPKSCDKTHICPPCAPELGSPSVFLFPPPKDQTLMTISRT 297
OY 496 KEYKCKVSNKALPAIEKTISSAKAGPREPQVYTLPPSRDELTKNOVSLTCLVKGFYPSD 555
    |||||
DB 358 KEYKCKVSNKALPAIEKTISSAKAGPREPQVYTLPPSRDELTKNOVSLTCLVKGFYPSD 417
OY 556 IAVEMESNQGPENNYKTTTPVLDSGSPFLYSKLTVDKSRMOQGNVFSQVMEHALHNHY 615
    |||||
DB 418 IAVEMESNQGPENNYKTTTPVLDSGSPFLYSKLTVDKSRMOQGNVFSQVMEHALHNHY 477
OY 616 TKQSLSLSPG 625

```

Db 478 TOKSLSPG 487

RESULT 79

US-08-784-512-3
; Sequence 3, Application US/08784512
; Patent No. 5872209
; GENERAL INFORMATION:
; APPLICANT: BARTNIK, Eckart
; APPLICANT: EIDENMUELLER, Bernd
; APPLICANT: BUETNER, Frank
; APPLICANT: CATERSON, Bruce
; APPLICANT: HUGHES, Clare
; TITLE OF INVENTION: An artificial recombinant substrate (RAGG 1)
; TITLE OF INVENTION: and native aggregan to study the proteolytic activity of
; TITLE OF INVENTION: "Aggreganase" in cell culture systems
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Foley & Lardner
; STREET: Suite 500, 3000 K Street, N.W.
; CITY: Washington, D.C.
; COUNTRY: USA
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/784,512
; FILING DATE: 17-JAN-1997
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: EP 96100682.2
; FILING DATE: 18-JAN-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: GRANADOS, Patricia D.
; REGISTRATION NUMBER: 33,663
; REFERENCE/DOCKET NUMBER: 18748/311
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 672-5300
; TELEFAX: (202) 672-5399
; TELEX: 904136
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 396 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..396
US-08-784-512-3

Query Match 37.2%; Score 1269; DB 2; Length 396;

Best Local Similarity 97.9%; Pred. No. 3.8e-94;
Matches 234; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 387 LPTWSPVPEPKSCDTHTCPCPAPAPLGGPSVFLFPKPKDTLMSRTPEVTCVVVDVS 446
DB 157 LFGGDPPEPKSCDTHTCPCPAPAPLGGPSVFLFPKPKDTLMSRTPEVTCVVVDVS 216
QY 447 HEDPEVKFNWYVDGVEVNAKTKPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKA 506
DB 217 HEDPEVKFNWYVDGVEVNAKTKPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKA 276
QY 507 LPAPLEKTSKAKGPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAMWESNQP 566
DB 277 LPAPLEKTSKAKGPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAMWESNQP 336
QY 567 ENNYKTPPVLDSDGSFPLYSKLTVDKSRWQGNVFCSCVMEALHNHYTOKSLSLSPG 625

Db 337 ENNYKTPPVLDSDGSFPLYSKLTVDKSRWQGNVFCSCVMEALHNHYTOKSLSLSPG 395

RESULT 80

US-09-176-228-3
; Sequence 3, Application US/09176228
; Patent No. 6180334
; GENERAL INFORMATION:
; APPLICANT: BARTNIK, Eckart
; APPLICANT: EIDENMUELLER, Bernd
; APPLICANT: BUETNER, Frank
; APPLICANT: CATERSON, Bruce
; APPLICANT: HUGHES, Clare
; TITLE OF INVENTION: An artificial recombinant substrate (RAGG 1)
; TITLE OF INVENTION: and native aggregan to study the proteolytic activity of
; TITLE OF INVENTION: "Aggreganase" in cell culture systems
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Foley & Lardner
; STREET: Suite 500, 3000 K Street, N.W.
; CITY: Washington, D.C.
; COUNTRY: USA
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/176,228
; FILING DATE:
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US/08/784,512
; FILING DATE: 17-JAN-1997
; APPLICATION NUMBER: EP 96100682.2
; FILING DATE: 18-JAN-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: GRANADOS, Patricia D.
; REGISTRATION NUMBER: 33,663
; REFERENCE/DOCKET NUMBER: 18748/311
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 672-5300
; TELEFAX: (202) 672-5399
; TELEX: 904136
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 396 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..396
US-09-176-228-3

Query Match 37.2%; Score 1269; DB 3; Length 396;

Best Local Similarity 97.9%; Pred. No. 3.8e-94;
Matches 234; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 387 LPTWSPVPEPKSCDTHTCPCPAPAPLGGPSVFLFPKPKDTLMSRTPEVTCVVVDVS 446
DB 157 LFGGDPPEPKSCDTHTCPCPAPAPLGGPSVFLFPKPKDTLMSRTPEVTCVVVDVS 216
QY 447 HEDPEVKFNWYVDGVEVNAKTKPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKA 506
DB 217 HEDPEVKFNWYVDGVEVNAKTKPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKA 276
QY 507 LPAPLEKTSKAKGPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAMWESNQP 566
DB 277 LPAPLEKTSKAKGPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAMWESNQP 336
QY 567 ENNYKTPPVLDSDGSFPLYSKLTVDKSRWQGNVFCSCVMEALHNHYTOKSLSLSPG 625

Db 337 ENNYKTPPVLDSGDSFFLYSKLTVDKSRMOQGNVFSVWHEALHNHYTQKSLSPG 395

RESULT 81
US-08-458-516-13

/ Sequence 13, Application US/08458516
/ Patent No. 577085

/ GENERAL INFORMATION:

/ APPLICANT: Co, Man Sung

/ APPLICANT: Tso, J. Yun

/ TITLE OF INVENTION: Humanized Antibodies Reactive with

/ TITLE OF INVENTION: GPIIb/IIIa

/ NUMBER OF SEQUENCES: 23

/ CORRESPONDENCE ADDRESS:

/ ADDRESS: William M. Smith

/ STREET: One Market Plaza, Steuart Tower, Suite 2000

/ CITY: San Francisco

/ STATE: California

/ COUNTRY: USA

/ ZIP: 94105

/ COMPUTER READABLE FORM:

/ MEDIUM TYPE: Floppy disk

/ COMPUTER: IBM PC compatible

/ OPERATING SYSTEM: PC-DOS/MS-DOS

/ SOFTWARE: Patent Release #1.0, Version #1.25

/ CURRENT APPLICATION DATA:

/ APPLICATION NUMBER: US/08/458,516

/ FILING DATE:

/ CLASSIFICATION: 424

/ PRIOR APPLICATION DATA:

/ APPLICATION NUMBER: US 08/059,159

/ FILING DATE: 03-MAY-1993

/ ATTORNEY/AGENT INFORMATION:

/ NAME: Smith, William M.

/ REGISTRATION NUMBER: 30,223

/ REFERENCE/DOCKET NUMBER: 11823-37-3

/ TELECOMMUNICATION INFORMATION:

/ TELEPHONE: 415-326-2400

/ TELEFAX: 415-326-2422

/ INFORMATION FOR SEQ ID NO: 13:

/ SEQUENCE CHARACTERISTICS:

/ LENGTH: 449 amino acids

/ TYPE: amino acid

/ STRANDEDNESS: single

/ TOPOLOGY: linear

/ MOLECULE TYPE: protein

/ US-08-458-516-13

Query Match 37.2%; Score 1269; DB 1; Length 449;
Best Local Similarity 96.7%; Pred. No. 4,6e-94;

Matches 236; Conservative 0; Mismatches 4; Indels 4; Gaps 1;

QY 302 SNIKVLPWTSTVPEPKSCDHTTCCPAPBELLGGPSVFLFPKPKDITLMSRTPEVTCV 441

DB 209 SNTKV-----DKVPEPKSCDHTTCCPAPBELLGGPSVFLFPKPKDITLMSRTPEVTCV 264

QY 442 VVDVHEDEPKVKNYVGVVHNAKTKRREQYNSTRVSVLVTLVHODMNGKEYCK 501

DB 265 VVDVHEDEPKVKNYVGVVHNAKTKRREQYNSTRVSVLVTLVHODMNGKEYCK 324

QY 502 VSNKALPAPIEKTISKAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEME 561

DB 335 VSNKALPAPIEKTISKAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEME 384

QY 562 SNGQENNYKTPPVLDSGDSFFLYSKLTVDKSRMOQGNVFSVWHEALHNHYTQKSL 621

DB 365 SNGQENNYKTPPVLDSGDSFFLYSKLTVDKSRMOQGNVFSVWHEALHNHYTQKSL 444

QY 622 LSPG 625

DB 445 LSPG 448

RESULT 82
US-09-301-593-30

/ Sequence 30, Application US/09301593A
/ Patent No. 6455677

/ GENERAL INFORMATION:

/ APPLICANT: Park, John E.

/ APPLICANT: Garin-Chesa, Pilar

/ APPLICANT: Bamberger, Uwe

/ APPLICANT: Leger, Olivier

/ APPLICANT: Saldaña, Jose W.

/ APPLICANT: Rettig, Wolfgang J.

/ TITLE OF INVENTION: PAP-specific Antibody with Improved Productibility

/ FILE REFERENCE: 0652.1890001

/ CURRENT APPLICATION NUMBER: US/09/301,593A

/ CURRENT FILING DATE: 1999-04-29

/ EARLIER APPLICATION NUMBER: EP 98107925.4

/ EARLIER FILING DATE: 1998-04-30

/ EARLIER APPLICATION NUMBER: US 60/086,049

/ EARLIER FILING DATE: 1998-05-18

/ NUMBER OF SEQ ID NOS: 108

/ SOFTWARE: Patentin Ver. 2.0

/ SEQ ID NO 30

/ LENGTH: 472

/ TYPE: PRT

/ ORGANISM: Homo sapiens

/ US-09-301-593-30

Query Match 37.2%; Score 1269; DB 4; Length 472;
Best Local Similarity 52.7%; Pred. No. 5e-94;

Matches 277; Conservative 39; Mismatches 76; Indels 134; Gaps 14;

QY 147 PGSSPSVQCRSPR-----GKNIOG-----G 166

DB 33 PGASVSKSCSKRTTFEYTHHWROSHKSLKLEIGGINPNNGIPNYNOKKGAATLTVG 92

QY 167 KTLISVQLEL-----QDSGTWCTVLQNKKEFKIDIIVLAFKASSIYKKEGBOVF 221

DB 93 KSSSTAYMELSLTSEDSAVFYCA-----RRIAVGYD-----EGHAMDY 132

QY 222 SFLAFTVEKLTGSGELMQLMQLERASSKSWTTPDLKKEVSVKRVTDPKLQMKKLP 281

DB 133 -----WGQTSVTVSSS-----TKGPSVFPLAPSSKSTSGTAALG 168

QY 282 LTLPOALPOVAGSGLTLTALFAKTKLHAEVNL--VVMRATOLQKNTCEWAGTSPKLM 339

DB 169 CLVVDYRPE-----PYTSMNSGALTSGVHTTPAYLQSGLY-SLSVTVTSS----- 216

QY 340 LSLKLENKEAKVSRERKRPVWVNLNPEAGMWOCLLSDSQVLLSNIKVLPWTSTVPEPKSC 399

DB 217 SLGTQTYICNVN--HKP-----SNTKV-----DKVPEPKSC 245

QY 400 DKHTTCCPAPBELLGGPSVFLFPKPKDITLMSRTPEVTCVVDVSHDEPKVKNYVD 459

DB 246 DKHTTCCPAPBELLGGPSVFLFPKPKDITLMSRTPEVTCVVDVSHDEPKVKNYVD 305

QY 460 GVEVHNAKTKRREQYNSTRVSVLVTLVHODMNGKEYCKVSNKALPAPIEKTISKAK 519

DB 306 GVEVHNAKTKRREQYNSTRVSVLVTLVHODMNGKEYCKVSNKALPAPIEKTISKAK 365

QY 520 GQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQENNYKTPPVLDS 579

DB 366 GQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQENNYKTPPVLDS 425

QY 580 DGSFFLYSKLTVDKSRMOQGNVFSVWHEALHNHYTQKSLSPG 625

DB 426 DGSFFLYSKLTVDKSRMOQGNVFSVWHEALHNHYTQKSLSPG 471

RESULT 83

PCT-US95-03866-12

/ Sequence 12, Application PC/TUS9503866

/ GENERAL INFORMATION:


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/ PRIOR APPLICATION NUMBER: PCT/EP 98/05165
/ PRIOR FILING DATE: 1998-08-14
/ PRIOR APPLICATION NUMBER: EPO 98870139.7
/ PRIOR FILING DATE: 1998-06-18
/ PRIOR APPLICATION NUMBER: EPO 97870122.5
/ PRIOR FILING DATE: 1997-08-18
/ NUMBER OF SEQ ID NOS: 104
/ SOFTWARE: Patent version 3.0
/ SEQ ID NO 67
/ LENGTH: 468
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: SYNTHETIC
US-09-485-737B-67

Query Match      37.2%; Score 1268.5; DB 4; Length 468;
Best Local Similarity 46.9%; Pred. No. 5.4e-94;
Matches 295; Conservative 39; Mismatches 102; Indels 193; Gaps 17;

QY 11 LVLQLALLPATQGNKVLGKKGDTVELTCTASQKKSIOFHWKNSNOIKILNGSFLT 70
DB 17 VILSQVOLVSGSE-----LKKPGASVKISCKAS---GYFTDYGMNWKQAPQGG---L 65
QY 71 KGPSKLNDRADSRSLMD-QGNFP-----LIINKLKIEDSDTYICEVEDQKEV 118
DB 66 KMMGWINTYTGSESTYVDFKGRFVSLDTSVAAYLISSLKABDTATYFC----- 116
QY 119 QLVVGLTANSPTHLQ--GQSLTLTLESPPGSSPSVQCRSPKNGIOGKTLVSQLEL 176
DB 117 -----ARRGFAMDYWGQGTIVTSSASTKGPSPVPLAPSSKTSGG--TALAGCL-- 165
QY 177 QDSGTMTCTVLQONQKVEFKIDIVLAFQKASSIYKKEGEQVEFSFPLAFTVEKLTGSG 236
DB 166 -----VNDYFPEPVTVS----- 177
QY 237 ELMMQAEASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPYAGSGN 296
DB 178 ---NMSGALTSG-----VH-TFPAVL-QSSGLYS 201
QY 297 LTLAEAKTGKLEHENVLVMWRATOLQKNLTCEVWGTPSKLMLSKLENBAKYSKREK 356
DB 202 LSSVVTVPSSSLGTGYI-----CNV-----NHK 225
QY 357 PWWVLNPEAGMWQCLSDSGQVLIESNIKVLPTWSTVEPKSCDKTHTCPCPAPPELLGG 416
DB 226 P-----SNTKV-----DKRVEPKSCDKTHTCPCPAPPELLGG 257
QY 417 PSVFLPPPKPKDMLISRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNATKPREEOYN 476
DB 258 PSVFLPPPKPKDMLISRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNATKPREEOYN 317
QY 477 STYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISAKAQGPPEQYTLPPSRDE 536
DB 318 STYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISAKAQGPPEQYTLPPSRDE 377
QY 537 LTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRW 596
DB 378 MTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRW 437
QY 597 QQGNVFSCSVHREALHNHYTQKSLSLSPG 625
DB 438 QQGNVFSCSVHREALHNHYTQKSLSLSPG 466

RESULT 86
US-09-485-737B-90
/ Sequence 90, Application US/09485737B
/ Patent No. 6350860
/ GENERAL INFORMATION:
/ APPLICANT: Buyee, Marie-Ange
/ APPLICANT: Sablon, Etwin
/ TITLE OF INVENTION: INTERFERON-gamma-BINDING MOLECULES FOR TREATING SEPTIC SHOCK,
```

```
/ TITLE OF INVENTION: CACHEXIA, IMMUNE DISEASES AND SKIN DISORDERS
/ FILE REFERENCE: INNS:015
/ CURRENT APPLICATION NUMBER: US/09/485, 737B
/ CURRENT FILING DATE: 2000-02-14
/ PRIOR APPLICATION NUMBER: PCT/EP 98/05165
/ PRIOR FILING DATE: 1998-08-14
/ PRIOR APPLICATION NUMBER: EPO 98870139.7
/ PRIOR FILING DATE: 1998-06-18
/ PRIOR APPLICATION NUMBER: EPO 97870122.5
/ PRIOR FILING DATE: 1997-08-18
/ NUMBER OF SEQ ID NOS: 104
/ SOFTWARE: Patent version 3.0
/ SEQ ID NO 90
/ LENGTH: 711
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: SYNTHETIC
US-09-485-737B-90

Query Match      37.2%; Score 1268.5; DB 4; Length 711;
Best Local Similarity 46.9%; Pred. No. 1e-93;
Matches 295; Conservative 39; Mismatches 102; Indels 193; Gaps 17;

QY 11 LVLQLALLPATQGNKVLGKKGDTVELTCTASQKKSIOFHWKNSNOIKILNGSFLT 70
DB 17 VILSQVOLVSGSE-----LKKPGASVKISCKAS---GYFTDYGMNWKQAPQGG---L 65
QY 71 KGPSKLNDRADSRSLMD-QGNFP-----LIINKLKIEDSDTYICEVEDQKEV 118
DB 66 KMMGWINTYTGSESTYVDFKGRFVSLDTSVAAYLISSLKABDTATYFC----- 116
QY 119 QLVVGLTANSPTHLQ--GQSLTLTLESPPGSSPSVQCRSPKNGIOGKTLVSQLEL 176
DB 117 -----ARRGFAMDYWGQGTIVTSSASTKGPSPVPLAPSSKTSGG--TALAGCL-- 165
QY 177 QDSGTMTCTVLQONQKVEFKIDIVLAFQKASSIYKKEGEQVEFSFPLAFTVEKLTGSG 236
DB 166 -----VNDYFPEPVTVS----- 177
QY 237 ELMMQAEASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPYAGSGN 296
DB 178 ---NMSGALTSG-----VH-TFPAVL-QSSGLYS 201
QY 297 LTLAEAKTGKLEHENVLVMWRATOLQKNLTCEVWGTPSKLMLSKLENBAKYSKREK 356
DB 202 LSSVVTVPSSSLGTGYI-----CNV-----NHK 225
QY 357 PWWVLNPEAGMWQCLSDSGQVLIESNIKVLPTWSTVEPKSCDKTHTCPCPAPPELLGG 416
DB 226 P-----SNTKV-----DKRVEPKSCDKTHTCPCPAPPELLGG 257
QY 417 PSVFLPPPKPKDMLISRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNATKPREEOYN 476
DB 258 PSVFLPPPKPKDMLISRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNATKPREEOYN 317
QY 477 STYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISAKAQGPPEQYTLPPSRDE 536
DB 318 STYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISAKAQGPPEQYTLPPSRDE 377
QY 537 LTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRW 596
DB 378 MTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRW 437
QY 597 QQGNVFSCSVHREALHNHYTQKSLSLSPG 625
DB 438 QQGNVFSCSVHREALHNHYTQKSLSLSPG 466

RESULT 87
US-09-313-942-9
/ Sequence 9, Application US/09313942
/ Patent No. 6472179
```

```
/ GENERAL INFORMATION:
/ APPLICANT: REGENERON PHARMACEUTICALS, INC.
/ TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
/ TITLE OF INVENTION: AND USING
/ FILE REFERENCE: REG 203-A
/ CURRENT APPLICATION NUMBER: US/09/313,942
/ PRIOR FILING DATE: 1999-05-19
/ PRIOR APPLICATION NUMBER: 09/313,942
/ PRIOR FILING DATE: 1999-05-19
/ PRIOR APPLICATION NUMBER: 60/101,858
/ PRIOR FILING DATE: 1998-09-25
/ NUMBER OF SEQ ID NOS: 32
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 9
/ LENGTH: 951
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-09-313-942-9
```

```
Query Match          37.2%; Score 1268.5; DB 4; Length 951;
Best Local Similarity 96.7%; Pred. No. 1.5e-93;
Matches 226; Conservative 0; Mismatches 4; Indels 4; Gaps 1;
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QY      382  SNIKVLPWSTPVEPKSCDKHTHTCPCPAPPELLGSPVFLFPKPKDITLMSRTPEVTCV 441
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
DB      711  SNTKV-----DKVEPKSCDKHTHTCPCPAPPELLGSPVFLFPKPKDITLMSRTPEVTCV 766

QY      442  VVDVSHEDPEVKNNVYDGVENHNAKTKPREEOYNSTRVVSVLTVLHODMLNGEYKCK 501
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
DB      767  VVDVSHEDPEVKNNVYDGVENHNAKTKPREEOYNSTRVVSVLTVLHODMLNGEYKCK 826

QY      502  VSNKALPAPIEKTISAKAGQPREPOVYTLPPSRDELITGNQVSLTCLVKGFPSPDIAVEME 561
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
DB      827  VSNKALPAPIEKTISAKAGQPREPOVYTLPPSRDELITGNQVSLTCLVKGFPSPDIAVEME 886

QY      562  SNGQPENNYKTTTPPVLDSDGSFPLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTQKSL 621
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
DB      887  SNGQPENNYKTTTPPVLDSDGSFPLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTQKSL 946

QY      622  LSPG 625
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
DB      947  LSPG 950
```

```
RESULT 88
US-09-247-352-3
/ Sequence 3, Application US/09247352
/ Patent No. 6312693
/ GENERAL INFORMATION:
```

```
/ APPLICANT: Arnulfo, Alejandro A.
/ APPLICANT: Sladak, Anthony W.
/ APPLICANT: Berry, Karen K.
/ APPLICANT: Harris, Linda
/ APPLICANT: Thorne, Barbara A.
/ APPLICANT: Bajorath, Jurgen
/ APPLICANT: Huse, William D.
/ APPLICANT: Wu, Heren
/ APPLICANT: Mackinn, Jeffrey D.
/ TITLE OF INVENTION: ANTIBODIES AGAINST HUMAN CD40
/ FILE REFERENCE: DB2a SEQUENCE
/ CURRENT APPLICATION NUMBER: US/09/247,352
/ CURRENT FILING DATE: 1999-02-10
/ EARLIER APPLICATION NUMBER: 09/026,291
/ EARLIER FILING DATE: 1998-02-19
/ NUMBER OF SEQ ID NOS: 14
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 3
/ LENGTH: 451
/ TYPE: PRT
/ ORGANISM: Human and Mouse
US-09-247-352-3
```

```
Query Match          37.1%; Score 1268; DB 4; Length 451;
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```
Best Local Similarity 48.4%; Pred. No. 5.6e-94;
Matches 224; Conservative 31; Mismatches 103; Indels 180; Gaps 17;
```

```
QY      30  LKKGDPTVELLTASOKSIOFHMKNSNOIKLGNQGSFLYTPSKLNDRADSRSLMD- 88
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
DB      11  LKKPGETVRISSKAS--GYAFTTGMQVQMPKPG--LKMIGMINTHSGVPKXVEDF 64

QY      89  OGNFP-----LIINKIKIEDSPVTCEDVDQEEVQLVFGLTANSDBTHLQGO 137
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
DB      65  KRFAPASLETSAHTVYLOISNLKNEDTATYFC-VNSGNQNDLAYFA-----YMQQ 114

QY      138  SLTLTLESPPGSSPSVOCSPRGKNIQGGKTLVSQLELSDSGTWTCTVLQKQKVEFKI 197
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
DB      115  GLTVTVSASTKGSPVFLAPSSKSTSGT-TAALGL----- 150

QY      198  DIVVLAFOKASSIVYKKEGQVEFSPLAFYTEKLTGSGELMWQAEKSSKSMITFDLK 257
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
DB      151  -----VKDYFPPEPVTVS-----WNSGALTSG----- 171

QY      258  NKEVSVKVTQDPKQLQMGKULPLHLTLQALPQVAGSGNLTALAKTKGKHQEVNLYVM 317
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
DB      172  -----VH-TFPAVL-QSSGLVSLSSVTVVPSSSLGTQTYI--- 204

QY      318  RATQQLKMLTCEVWGPTSPKMLSLKLENKAKVSKREKPVVVLNPEAGMQLSLDSQG 377
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
DB      205  -----CNV-----NKP----- 211

QY      378  VLLESNIKVLPWSTPVEPKSCDKHTHTCPCPAPPELLGSPVFLFPKPKDITLMSRPE 437
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
DB      212  ----SNTKV-----DKVEPKSCDKHTHTCPCPAPPELLGSPVFLFPKPKDITL-ISRPE 262

QY      438  VTCVVVVDVSHEDPEVKFMMVYDGVENHNAKTKPREEOYNSTRVVSVLTVLHODMLNGE 497
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
DB      263  VTCVVVVDVSHEDPEVKFMMVYDGVENHNAKTKPREEOYNSTRVVSVLTVLHODMLNGE 322

QY      498  YKCKVSNKALPAPIEKTISAKAGQPREPOVYTLPPSRDELITGNQVSLTCLVKGFPSPDIA 557
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
DB      323  YKCKVSNKALPAPIEKTISAKAGQPREPOVYTLPPSRDELITGNQVSLTCLVKGFPSPDIA 382

QY      558  VEMESNGQPENNYKTTTPPVLDSDGSFPLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTQ 617
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
DB      383  VEMESNGQPENNYKTTTPPVLDSDGSFPLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTQ 442

QY      618  KSLSLSPG 625
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
DB      443  KSLSLSPG 450
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```
RESULT 89
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US-09-466-635-3
/ Sequence 3, Application US/09466635
/ Patent No. 6413514
/ GENERAL INFORMATION:
/ APPLICANT: Arnulfo, Alejandro A.
/ APPLICANT: Sladak, Anthony W.
/ APPLICANT: Berry, Karen K.
/ APPLICANT: Harris, Linda
/ APPLICANT: Thorne, Barbara A.
/ APPLICANT: Bajorath, Jurgen
/ TITLE OF INVENTION: ANTIBODIES AGAINST HUMAN CD40
/ CURRENT APPLICATION NUMBER: US/09/466,635
/ CURRENT FILING DATE: 1999-12-17
/ NUMBER OF SEQ ID NOS: 8
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 3
/ LENGTH: 451
/ TYPE: PRT
/ ORGANISM: Human and Mouse
US-09-466-635-3
```

```
Query Match          37.1%; Score 1268; DB 4; Length 451;
Best Local Similarity 48.4%; Pred. No. 5.6e-94;
```

```
Matches 294; Conservative 31; Mismatches 103; Indels 180; Gaps 17;
QY 30 LGKKDPTVELCTASQKKSIOFHMKNNSQIKILGNQSGFLTKGSPKLNDRADSRRLMD- 88
DB 11 LKKEEIVRISCKKS---GYAFTTGQWVOEMPEKG---LKWIGMITHSGVPEKYEDF 64
QY 89 QGNRP-----LIIKNLKIEDSDTYICEVEDQKEVQLLVFGLTANSDDTHLLOGQ 137
DB 65 KGRFAFSLSTSANFAYLIQISNLKNEEDTATYFC-VMSGNGNYDLAVFA-----YWGQ 114
QY 138 SLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWCTVTLQNOKKVEKI 197
DB 115 GTLVVSAASTKGPSVFPPLAPSSKSTSGG-TAALGCL----- 150
QY 198 DIVVLAFOKASSIYKKEGEQVEFSFPLAFTVEKLTSGSELWMQAEARASSKSWITFDLK 257
DB 151 -----VKDYFPEPVTS-----WMSGALTSG----- 171
QY 258 NKEVSVKRVTDQPKLQMGKULPHLTLPOALPOYAGSGLTLALEAKTGKLGHOEVLVVM 317
DB 172 -----VH-TFPAVL-QSSGLYSLSSVTVTPSSISGTOTYI--- 204
QY 318 RATQLOKULTCEVWGPTSPKMLSLKLENKAKVSKREKPVWVLNPEAGMQCLLSDSGQ 377
DB 205 -----CNV-----NHKP----- 211
QY 378 VLLESNIKVLPTWSTPVEPKSCDKHTHPCPCAPABELGSPSVFLPPPKKDTLMI 437
DB 212 -----SNTKV-----DKKVEPKSCDKHTHPCPCAPABELGSPSVFLPPPKKDTLMI 262
QY 438 VTCVVDVSHEDPEVEKFMWYVDGVEVHNAKTKPREEOYNSTYRVVSVLTVLHODWLNKE 497
DB 263 VTCVVDVSHEDPEVEKFMWYVDGVEVHNAKTKPREEOYNSTYRVVSVLTVLHODWLNKE 322
QY 498 YKCKSNKALPAPIEKTISKAGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIA 557
DB 323 YKCKSNKALPAPIEKTISKAGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIA 382
QY 558 VEMESNGOPENNKTTPPYLDSGSEFFLYSKLTVDSKRMQGNVSCVMHEALHNTQTQ 617
DB 383 VEMESNGOPENNKTTPPYLDSGSEFFLYSKLTVDSKRMQGNVSCVMHEALHNTQTQ 442
QY 618 KSLSLSPG 625
DB 443 KSLSLSPG 450

RESULT 90
US-09-301-593-43
; Sequence 43, Application US/09301593A
; Patent No. 6455677
; GENERAL INFORMATION:
; APPLICANT: Park, John E.
; APPLICANT: Garin-Chesa, Pilar
; APPLICANT: Bamberger, Uwe
; APPLICANT: Legier, Olivier
; APPLICANT: Saidanah, Jose W.
; APPLICANT: Retzig, Wolfgang J.
; TITLE OF INVENTION: FAP-specific Antibody with improved Productibility
; FILE REFERENCE: 0652.1890001
; CURRENT APPLICATION NUMBER: US/09/301.593A
; EARLIER FILING DATE: 1999-04-29
; EARLIER APPLICATION NUMBER: EP 98107925.4
; EARLIER FILING DATE: 1998-04-30
; EARLIER APPLICATION NUMBER: US 60/086,049
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 43
; LENGTH: 472
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-301-593-43
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```
Query Match 37.1%; Score 1268; DB 4; Length 472;
Best Local Similarity 50.8%; Pred. No. 6e-94;
Matches 281; Conservative 40; Mismatches 94; Indels 138; Gaps 14;
QY 120 LVFGLTANSDDTHLLOGOSLTLTLESPGSSPSVQCSPP----- 159
DB 10 LLAVAPGAHSQVOVLQSGAEV---KKPGASVKSCKTSRYTPTETIHWVRAPGARLE 65
QY 160 -----GKXIOGGKTLV-----SOLEQDSGTWCTVTLQNOKVE 194
DB 66 WIGGINPNNGIPVYNQFKGRATLTVGKSASTAMELSSLRSEDTAYYCA---RRRIA 121
QY 195 FKIDIVLAFOKASSIYKKEGEQVEFSFPLAFTVEKLTSGSELWMQAEARASSKSWITF 254
DB 122 YGVD-----EGHAMDY-----WGGQ-----TLVTY 141
QY 255 DLKKEVSVKRVTDQPKLQMGKULPHLTLPOALPOYAGSGLTLALEAKTGKLGHOEVL 314
DB 142 SSSSTKGPVFPPLAPSSKSTSGTALGCLVADYFPE-----PVTVWMSGALTSGVHT 194
QY 315 --VYMRATQLOKULTCEVWGPTSPKMLSLKLENKAKVSKREKPVWVLNPEAGMQCLL 372
DB 195 FPAVLQSSGLY-SLSSVTVTPSS-----SLGTOTYICNV--HKP----- 231
QY 373 SDSGQVLLESNIKVLPTWSTPVEPKSCDKHTHPCPCAPABELGSPSVFLPPPKKDTLMI 432
DB 232 -----SNTKV-----DKKVEPKSCDKHTHPCPCAPABELGSPSVFLPPPKKDTLMI 278
QY 433 SRPEVTCVVDVSHEDPEVEKFMWYVDGVEVHNAKTKPREEOYNSTYRVVSVLTVLHODW 492
DB 279 SRPEVTCVVDVSHEDPEVEKFMWYVDGVEVHNAKTKPREEOYNSTYRVVSVLTVLHODW 338
QY 493 LNKKEYCKVSNKALPAPIEKTISKAGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPY 552
DB 339 LNKKEYCKVSNKALPAPIEKTISKAGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPY 398
QY 553 PSDIAVEMESNGOPENNKTTPPYLDSGSEFFLYSKLTVDSKRMQGNVSCVMHEALH 612
DB 399 PSDIAVEMESNGOPENNKTTPPYLDSGSEFFLYSKLTVDSKRMQGNVSCVMHEALH 458
QY 613 NHTYQKSLSLSPG 625
DB 459 NHTYQKSLSLSPG 471

RESULT 91
US-09-180-100-11
; Sequence 11, Application US/09180100
; Patent No. 6306395
; GENERAL INFORMATION:
; APPLICANT: NAKAMURA, No. 6306395io
; APPLICANT: NAKATA, Shigekazu
; TITLE OF INVENTION: NOVEL Fas ANTIGEN DERIVATIVE
; FILE REFERENCE: 1110-207P
; CURRENT APPLICATION NUMBER: US/09/180.100
; EARLIER FILING DATE: 1998-11-02
; EARLIER APPLICATION NUMBER: PCT/JP97/01502
; EARLIER FILING DATE: 1997-05-01
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 11
; LENGTH: 360
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-180-100-11

Query Match 37.1%; Score 1267.5; DB 4; Length 360;
Best Local Similarity 91.9%; Pred. No. 4.4e-94;
Matches 238; Conservative 2; Mismatches 16; Indels 3; Gaps 1;
QY 370 CLLSDSG---QVLLESNIKVLPTWSTPVEPKSCDKHTHPCPCAPABELGSPSVFLPPPKP 426
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Db 101 CTKCEHGIIECTLTNTKCKEGRSNNBPKSCDKTHTCPCPAPPELLGSPVFLPPKP 160
QY 427 KDTLMSRTPEVTCVAVDVSHDEPEVKFMVYDGVENHNAKTKPREOYNSTRVVSVL 486
Db 161 KDTLMSRTPEVTCVAVDVSHDEPEVKFMVYDGVENHNAKTKPREOYNSTRVVSVL 220
QY 487 VLIHQDLNGKEYKCKVSNKALPAPIEKTSKAKGQPREPOVYTLPPSRDELTKNQVSL 546
Db 221 VLIHQDLNGKEYKCKVSNKALPAPIEKTSKAKGQPREPOVYTLPPSRDELTKNQVSL 280
QY 547 LVKGFYPSDIAVWESNCGPENNYKTTTPVLDSDGSFPLYSKLTVDKSRWQOGNVS 606
Db 281 LVKGFYPSDIAVWESNCGPENNYKTTTPVLDSDGSFPLYSKLTVDKSRWQOGNVS 340
QY 607 MHEALHNHYTKSLSPG 625
Db 341 MHEALHNHYTKSLSPG 359

RESULT 92
US-09-180-100-222
/ Sequence 22, Application US/09180100
/ Patent No. 6306395
/ GENERAL INFORMATION:
/ APPLICANT: NAKAMURA, No. 630639510
/ APPLICANT: NAGATA, Shigekazu
/ TITLE OF INVENTION: NOVEL FAS ANTIGEN DERIVATIVE
/ FILE REFERENCE: 1110-207P
/ CURRENT APPLICATION NUMBER: US/09/180,100
/ EARLIER FILING DATE: 1998-11-02
/ EARLIER APPLICATION NUMBER: PCT/JP97/01502
/ NUMBER OF SEQ ID NOS: 25
/ SOFTWARE: Patentin Ver. 2.0
/ SEQ ID NO 22
/ LENGTH: 376
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-09-180-100-222

Query Match 37.1%; Score 1267.5; DB 4; Length 376;
Best Local Similarity 91.9%; Pred. No. 4,7e-94;
Matches 228; Conservative 2; Mismatches 16; Indels 3; Gaps 1;

QY 370 CLLSDBG---QVLLSENIVKLPWSTPVPKSCDKTHTCPCPAPPELLGSPVFLPPKP 426
Db 117 CTKCEHGIIECTLTNTKCKEGRSNNBPKSCDKTHTCPCPAPPELLGSPVFLPPKP 176
QY 427 KDTLMSRTPEVTCVAVDVSHDEPEVKFMVYDGVENHNAKTKPREOYNSTRVVSVL 486
Db 177 KDTLMSRTPEVTCVAVDVSHDEPEVKFMVYDGVENHNAKTKPREOYNSTRVVSVL 236
QY 487 VLIHQDLNGKEYKCKVSNKALPAPIEKTSKAKGQPREPOVYTLPPSRDELTKNQVSL 546
Db 237 VLIHQDLNGKEYKCKVSNKALPAPIEKTSKAKGQPREPOVYTLPPSRDELTKNQVSL 296
QY 547 LVKGFYPSDIAVWESNCGPENNYKTTTPVLDSDGSFPLYSKLTVDKSRWQOGNVS 606
Db 297 LVKGFYPSDIAVWESNCGPENNYKTTTPVLDSDGSFPLYSKLTVDKSRWQOGNVS 356
QY 607 MHEALHNHYTKSLSPG 625
Db 357 MHEALHNHYTKSLSPG 375

RESULT 93
US-09-027-449-71
/ Sequence 71, Application US/09027449
/ Patent No. 6025158
/ GENERAL INFORMATION:
/ APPLICANT: Gonzalez, Tania R.
/ APPLICANT: Leon, Steven R.
/ APPLICANT: Presta, Leonard G.
```

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/ TITLE OF INVENTION: Antibody Fragment-Polymer Conjugates and
/ TITLE OF INVENTION: Humanized Anti-IL-8 Monoclonal Antibodies
/ NUMBER OF SEQUENCES: 72
/ CORRESPONDENCE ADDRESS:
/ ADDRESSER: Genentech, Inc.
/ STREET: 1 DNA Way
/ CITY: South San Francisco
/ STATE: California
/ COUNTRY: USA
/ ZIP: 94080
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Winpatin (Genentech)
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/027,449
/ FILING DATE: 20-Feb-1998
/ CLASSIFICATION: 435
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 60/074,330
/ FILING DATE: 22-Jan-1998
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 60/038,664
/ FILING DATE: 21-Feb-1997
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Love, Richard B.
/ REGISTRATION NUMBER: 34,659
/ REFERENCE/DOCKET NUMBER: P1085R3-2
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 650/225-5530
/ TELEFAX: 650/952-9881
/ INFORMATION FOR SEQ ID NO: 71:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 452 amino acids
/ TYPE: Amino Acid
/ TOPOLOGY: Linear
US-09-027-449-71

Query Match 37.1%; Score 1267.5; DB 3; Length 452;
Best Local Similarity 48.3%; Pred. No. 6,2e-94;
Matches 291; Conservative 34; Mismatches 109; Indels 169; Gaps 15;

QY 30 LGKGDYIELTCITAS-QKSIQFHMKNSNQIKILNGSGF-LTGGPKLNDRAISRSL 86
Db 11 LVQPGSLRLSCAAGSYFSSHYMMWVRQAPGKGLWVGVIIDPSGRTTYNQKFGKGRFTL 70
QY 87 W---DOGNFPLIIKLIKIEDSDTYICEVEDQKEBVQLVFGLTANSDTHL-LOGQSLRL 142
Db 71 SRDNKNTATVLOMNSLRBEDTAVIYICARGDYR-----YNGDFPVDWQGGTLVT 119
QY 143 LESPSSPSVQCRSPRGKNIQGGKTLVSQLELDGSGTWCTVYLQNKVFEKIDIVVL 202
Db 120 VSSASTKGPVFPPLPSSKSTSG-TALGCL----- 150
QY 203 AFQKASSLVYKKEGQVEFSPPLAFTVEKLTGSGGLWQAERASSKSWITFDLKNKEVS 262
Db 151 -----VDYFPEBPTVS-----WNSGALTSG----- 171
QY 263 VKRVTQDPLQWKKLPHLLTLPOALPOYAGSGNLTLLAEKGLHQEVNLVVMRATOL 322
Db 172 -----VH-TFPVAVL-QSSGLYSLSSVVTYPPSSLGTYI----- 204
QY 323 QKNLTCEVWGPTSPKMLSLKLENKATVSRREKPVWVLNPDAGMOCLLSDSGVILLES 382
Db 205 -----CNV-----NHRP-----S 212
QY 383 NIKULPTWSTPVEPKSCDKTHTCPCPAPPELLGSPVFLPPKPKDTLMSRTPEVTCV 442
Db 213 NTKV-----DKRVEPKSCDKTHTCPCPAPPELLGSPVFLPPKPKDTLMSRTPEVTCV 268
QY 443 VDVSHDEPEVKFMVYDGVENHNAKTKPREOYNSTRVVSVLTVLIHQDLNGKEYKCKV 502
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Db 269 VDVSHDEPEVKFNMYVDGVEVHNNAKTKPREQYNSTYRVSVLTVLHODMLNGKEYCKV 328
QY 503 SNKALPAPIEKTISKAKGPREPOVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMES 562
Db 329 SNKALPAPIEKTISKAKGPREPOVYTLPPSRDEMTKNQVSLTCLVKGFYPSDIAVEMES 388
QY 563 NGQPENNYKTTTPPLVLDSDGSFFLYSKLTVDKSRWQGNVSCSYMHDLNHHYTKSL 622
Db 389 NGQPENNYKTTTPPLVLDSDGSFFLYSKLTVDKSRWQGNVSCSYMHDLNHHYTKSL 448
QY 623 SPG 625
Db 449 SPG 451

RESULT 94
US-09-026-985-71
Sequence 71, Application US/09026985
Patent No. 6133426
GENERAL INFORMATION:
APPLICANT: Gonzalez, Tania R.
APPLICANT: Leong, Steven R.
APPLICANT: Presta, Leonard G.
TITLE OF INVENTION: Antibody Fragment-Polymer Conjugates and
TITLE OF INVENTION: Humanized Anti-IL-8 Monoclonal Antibodies
NUMBER OF SEQUENCES: 72
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 1 DNA Way
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatIn (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/026,985
FILING DATE: 20-Feb-1998
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Love, Richard B.
REGISTRATION NUMBER: 34,659
REFERENCE/DOCKET NUMBER: P1085R3-1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-5530
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 71:
SEQUENCE CHARACTERISTICS:
LENGTH: 452 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
US-09-026-985-71

Query Match 37.1%; Score 1267.5; DB 3; Length 452;
Best Local Similarity 48.3%; Pred No. 6.2e-94;
Matches 291; Conservative 34; Mismatches 109; Indels 169; Gaps 15;

QY 30 LKKKGDVLELTCTAS--QKKSIOFWKNSNOIKILGNQGSF-LTYGPKSLNDRADSRSL 86
Db 11 LVQPGSLRLSCAAGVSPFSHYMWVWAQAPKGLGWGYIDPSGETTYNQKFGKRTLT 70
QY 87 W---DQGNPPLIKLKLTEDSDTYICEVEDQKEVQLLVFGILTANSDTHL-LQGSLTLT 142
Db 71 SRDNKNTAYLQWNSLRADTVVYVCARDYV-----YXGDFPFVWGQGLTVT 119
QY 143 LESPPSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWCTVQLQNKVYFKDIIVL 202
Db 120 VSSASTKGPVPLAPSSKSTSGC-TAALGCT----- 150
QY 203 AFQKASIVYKKGEQVEFSPPLAFTVEKLTGSGELMWQAERASSSSKSMITFDLKNKEVS 262

Db 151 -----YKDYFPEPVTVS-----WNGALTSG----- 171
QY 263 VKRVTQDPKLGWKKPLHLHTLPQALPOYVAGSGLTLALEAKTKGLHGEVVLVYMRATQL 322
Db 172 -----VH-TFPAVL-QSSGLSLSSVIVVPSSSLGTQYTI----- 204
QY 323 QKNLTCEWGTSPFKMLSLKENKEAKVSKREKPVVVLNPEAGMOCLLSDSGVLLS 382
Db 205 -----CNV-----NHKP-----S 212
QY 383 NIKVLPFTWSTPVEPKSCDKHTHTCPCPAPELLGSPVFLPPPKKDTLMTSRTEVTCV 442
Db 213 NTKV-----DKKVEPKSCDKHTHTCPCPAPELLGSPVFLPPPKKDTLMTSRTEVTCV 268
QY 443 VDVSHDEPEVKFNMYVDGVEVHNNAKTKPREQYNSTYRVSVLTVLHODMLNGKEYCKV 502
Db 269 VDVSHDEPEVKFNMYVDGVEVHNNAKTKPREQYNSTYRVSVLTVLHODMLNGKEYCKV 328
QY 503 SNKALPAPIEKTISKAKGPREPOVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMES 562
Db 329 SNKALPAPIEKTISKAKGPREPOVYTLPPSRDEMTKNQVSLTCLVKGFYPSDIAVEMES 388
QY 563 NGQPENNYKTTTPPLVLDSDGSFFLYSKLTVDKSRWQGNVSCSYMHDLNHHYTKSL 622
Db 389 NGQPENNYKTTTPPLVLDSDGSFFLYSKLTVDKSRWQGNVSCSYMHDLNHHYTKSL 448
QY 623 SPG 625
Db 449 SPG 451

RESULT 95
US-09-121-952A-71
Sequence 71, Application US/09121952A
Patent No. 6458355
GENERAL INFORMATION:
APPLICANT: Genentech, Inc., Hsui, Vanessa
APPLICANT: Koumets, Iphigenia
APPLICANT: Leong, Steven R.
APPLICANT: Presta, Leonard G.
APPLICANT: Shantokh, Zahra
TITLE OF INVENTION: METHODS OF TREATING INFLAMMATORY DISEASES
TITLE OF INVENTION: WITH ANTI-IL-8 ANTIBODY FRAGMENT-POLYMER CONJUGATES
NUMBER OF SEQUENCES: 72
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 1 DNA Way
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatIn (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/121,952A
FILING DATE: 24-Jul-1998
CLASSIFICATION: 514
Prior Application Data:
APPLICATION NUMBER: 60/074330
FILING DATE: 22-JAN-1998
Prior Application Data:
APPLICATION NUMBER: 60/075467
FILING DATE: 20-FEB-1998
ATTORNEY/AGENT INFORMATION:
NAME: Love, Richard B.
REGISTRATION NUMBER: 34,659
REFERENCE/DOCKET NUMBER: P1085R4
TELECOMMUNICATION INFORMATION:

<i>Oy</i>	503	SNNALPAPIEKITSKAKGP	PREFQVYTLTPRSDELTKNOVSJTCLYGFGPSDIAWEMES	5622
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<i>Db</i>	329	SNNALPAPIEKITSKAKGP	PREFQVYTLTPRSDEETKNQVSLTCLYKGFPSPDIABWEMES	3888
<i>Oy</i>	563	NGOPENNYYKTTPVLDS	DGSGFPLYSKLTIVDSRMOOGNVFSCSYVMHEALHNHYTKSLSL	6222
<i>Db</i>	389	NGOPENNYYKTTPVLDS	DGSGFPLYSKLTIVDSRKMOOGNVFSCSYVMHEALHNHYTKSLSL	4448
<i>Oy</i>	623	SPG	625	
<i>Db</i>	449	SPG	451	

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RESULT 97
US-09-532-856-6
Sequence 6, Application US/09532856
Patent No. 6458350
GENERAL INFORMATION:
APPLICANT: COSMAN, David J.
APPLICANT: MULLBERG, Jurgen H.
APPLICANT: FANSLON III, William C.
APPLICANT: KUBIN, Marek
TITLE OF INVENTION: ULBP DNA AND POLYPEPTIDES
FILE REFERENCE: 2866-USA
CURRENT APPLICATION NUMBER: US/09/532,856
EARLIER FILING DATE: 2000-03-22
EARLIER APPLICATION NUMBER: PCT/US98/27048
EARLIER FILING DATE: 1998-12-17
EARLIER APPLICATION NUMBER: 60/069,857
EARLIER FILING DATE: 1997-12-17
EARLIER APPLICATION NUMBER: 60/092,946
EARLIER FILING DATE: 1998-07-15
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 6
LENGTH: 453
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
NAME/KEY: PEPTIDE
LOCATION: (1)..(223)
OTHER INFORMATION: ULBP-2 sequences
FEATURE:
NAME/KEY: PEPTIDE
LOCATION: (224)..(453)
OTHER INFORMATION: Human Ig Fc sequences
US-09-532-856-6

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Query Match	37.1 %	Score 1267.5	DB 4	Length 453
Best Local Similarity	60.0 %	Pred. No. 6, 2e-94		
Matches 263	Conservative 30	Mismatches 66	Indels 79	Gaps 10
Qy	236	GEIIMWQHERASSSSKSNITFDLKNKEVSVKRVYQDEPKLQMGKKLPLHLTLPLQALPOLYAGSG	295	
Db	46	GPRKCAVQGVDEKTKFLHYDCGKNVY-----PVSPLGKKL-----	81	
Qy	296	NLTFLAEAKTGKLHGEVNLVWNRATQLOKNIITCEVWGSPSP-KLMLSKLENKEAKVSK-	353	
Db	82	NTYTAWKAQNPRLREVVDL---TEQRLDIQLENYTRPREPLTLQARKSCGQKAEHSGS	137	
Qy	354	-----REKPYW-VLNPEA-----GMIQCL--LSDS	375	
Db	138	SWQSPFDQIPLFLEDEKEMWTTHFGARKMKKEKENDKVVAMSPHYFSMDCTGIWLED-	186	
Qy	376	GQVLLSNIINVLPTWSTPVE-----PKSCDKHTHTPCPCAPRLLAGSPVFLFPKPK	427	
Db	197	--FLMGMDSTLEPSAQAPLAMSSGTTQLRRSCDKTKHTPCPCAPRABSPVFLFPKPK	254	
Qy	428	DTLMIISRTPEVTCVVVDVSHEDPEVKFNKYVGVGVNNAAKTKPREEQNSTYRVASVLTV	487	
Db	255	DTLMISRTPEVTCVVVDVSHEDPEVKFNKYVGVGVNNAAKTKPREEQNSTYRVASVLTV	314	
Qy	488	LHODWINGEKYKCVSNKALPARIEKTIISKAGQPREPOVYTLTPPSRDLTKQVSLTCL	547	

Db	Seq	Length
Db	315 LHQDMLNGKXKYEKKCKYCNKALPAPIRKTISKAKGQREQVYTLPPSRNRLKNGVSLTCL	374
Qy	548 VKGFPYSDDIAVWESNGQPENNYKTTTPVLDSDGSFFLYSKLTYDKSRHQGNVFSQVM	607
Db	375 VKGFPYSDDIAVWESNGQPENNYKTTTPVLDSDGSFFLYSKLTYDKSRHQGNVFSQVM	434
Qy	608 HEALHNHYTKSLSLSPG 625	
Db	435 HEALHNHYTKSLSLSPG 452	

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RESULT 98
US-09-524-100C-6
/ Sequence 6, Application US/09524100C
/ Patent No. 6653447
/ GENERAL INFORMATION:
/ APPLICANT: COSMAN, David J.
/ APPLICANT: MULLERBERG, Jurgen H.
/ APPLICANT: FANSLON III, William C.
/ APPLICANT: KUBIN, Marek
/ APPLICANT: ARMITAGE, Richard J.
/ TITLE OF INVENTION: ULBP DNA AND POLYPEPTIDES
/ FILE REFERENCE: 2866-US
/ CURRENT APPLICATION NUMBER: US/09/524,100C
/ CURRENT FILING DATE: 2002-05-21
/ PRIOR APPLICATION NUMBER: PCT/US98/27048
/ PRIOR FILING DATE: 1998-12-17
/ PRIOR APPLICATION NUMBER: US 60/069,857
/ PRIOR FILING DATE: 1997-12-17
/ PRIOR APPLICATION NUMBER: US 60/092,946
/ PRIOR FILING DATE: 1998-07-15
/ NUMBER OF SEQ ID NOS: 14
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO 6
/ LENGTH: 453
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Peptide
/ FEATURE:
/ NAME/KEY: PEPTIDE
/ LOCATION: (1)..(223)
/ OTHER INFORMATION: ULBP-2 sequences
/ FEATURE:
/ NAME/KEY: PEPTIDE
/ LOCATION: (224)..(453)
/ OTHER INFORMATION: Human Ig Fc sequences
US-09-524-100C-6

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Query Match	37.1%	Score 1267.5	DB 4	Length 453
Best Local Similarity	60.0%	Pred. No. 6,2e-94		
Matches	263	Conservative	30	Mismatches 66; Indels 79; Gaps 10

QY	236	GEIIMQAEIRASSSKSNTITD.LKKEVSVKRYTODPKLOMGKKLP.LHLTLTPOALPQYAGSG	295S
DB	46	GPRKCAVOGVDEKPTFLHYDCGNKTVT-----FVSLPGLKTL-----	81
QY	296	NLT.LTAEAKTGK.HQEVN.LVWRATOLQNLITCEVWGTSPT-K.LML.SIKLENKEAKVSK-	353S
DB	82	NVTTAKMAQNPV.LREVVDL-----TEQRLDITQENYTPKPELTLTQARNSCGQAKEGHSSG	137T
QY	354	-----REKPVV-VLNPAA-----GMQCI--LSDS	379T
DB	138	SMQSFDPGQIFLLFDSEKRMWTTVAHFGARKKMEKENDKVVAMSFHYFSMDCIGLWLED-	186T
QY	376	GOYLIESNIKVLPTWMTSTPVE-----PKSCDKNTHTCPCPABELLGGSPVFLFPKPK	427T
DB	197	--FLMGMDSTLBSAAAPLAMSSTGTQLARSCDKHTHTPCPCAPABABAPSVFLFPKPK	25T
QY	428	DTLMIKSTPEVTCVVVDVSHEDPEVKFMYVDDGVENHNAKTKPRREOQNTSTYRVASVLTV	48T
DB	255	DTLMIKSTPEVTCVVVDVSHEDPEVKFMYVDDGVENHNAKTKPRREOQNTSTYRVASVLTV	314T

Qy 602 FSCSYMHGALHNYTOKSLSPG 625
|||
Db 364 FSCSYMHGALHNYTOKSLSPG 387
|||

Search completed: August 3, 2004, 13:16:47
Job time : 29.0695 secs

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OM protein - protein search, using sw model

Run on: August 3, 2004, 13:01:34 ; Search time 15.0673 Seconds
(without alignments)
1734.300 Million cell updates/sec

Title: SEQ8
Perfect score: 2702
Sequence: 1 MNRGVPRHLLVLGLALP.....VISFLGLGVACVLARR 512

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 125 summaries

Database : Issued Patente AA: *
1: /cgn2_6/prodata/2/1aa/5A COMB.pep: *
2: /cgn2_6/prodata/2/1aa/5B COMB.pep: *
3: /cgn2_6/prodata/2/1aa/6A COMB.pep: *
4: /cgn2_6/prodata/2/1aa/6B COMB.pep: *
5: /cgn2_6/prodata/2/1aa/PC/US COMB.pep: *
6: /cgn2_6/prodata/2/1aa/backfile1.pep: *

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2122	78.5	432	3	US-08-477-460B-2
2	2122	78.5	432	3	US-08-379-516-2
3	2122	78.5	432	3	US-09-329-916-2
4	2122	78.5	432	3	US-08-485-372A-2
5	2122	78.5	432	4	US-09-409-006A-2
6	2122	78.5	432	4	US-08-484-681-2
7	2122	78.5	432	5	PCT-US93-07422-2
8	2092	77.4	630	4	US-08-472-888A-6
9	2085	77.2	530	3	US-08-477-460B-4
10	2085	77.2	530	3	US-08-379-516-4
11	2085	77.2	530	3	US-09-329-916-4
12	2085	77.2	530	3	US-08-485-372A-4
13	2085	77.2	530	4	US-09-409-006A-4
14	2085	77.2	530	4	US-08-484-681-4
15	2085	77.2	530	5	PCT-US93-07422-4
16	1647.5	61.0	410	3	US-08-630-172-17
17	1647.5	61.0	410	3	US-09-375-419-17
18	1338.5	49.5	254	2	US-08-284-391B-33
19	1338.5	49.5	254	2	US-09-218-950-33
20	1284.5	47.5	445	3	US-08-157-101A-7
21	1282.5	47.5	445	3	US-08-397-411-7
22	1276.5	47.2	475	4	US-09-740-002-85
23	1274.5	47.2	454	2	US-07-934-373C-22
24	1274.5	47.2	454	3	US-08-437-642B-22
25	1274.5	47.2	454	4	US-08-146-206C-22
26	1274.5	47.2	454	4	US-09-705-686-22
27	1274.5	47.2	454	5	PCT-US93-07632-22

28	1274.5	47.2	473	3	US-09-049-672A-4	Sequence 4, Appl
29	1273.5	47.1	475	4	US-09-740-002-27	Sequence 27, Appl
30	1273.5	47.1	495	4	US-09-499-846-6	Sequence 6, Appl
31	1273.5	47.1	525	4	US-09-499-846-4	Sequence 4, Appl
32	1273.5	47.1	622	4	US-09-499-846-2	Sequence 2, Appl
33	1271.5	47.1	453	4	US-09-301-593-18	Sequence 18, Appl
34	1271	47.0	476	3	US-08-487-550-12	Sequence 12, Appl
35	1271	47.0	476	4	US-09-526-098-11	Sequence 11, Appl
36	1265.5	46.8	468	4	US-09-485-737B-67	Sequence 67, Appl
37	1265.5	46.8	711	4	US-09-485-737B-90	Sequence 90, Appl
38	1265	46.8	449	1	US-08-458-516-13	Sequence 13, Appl
39	1264	46.8	451	4	US-09-247-352-3	Sequence 3, Appl
40	1264	46.8	451	4	US-09-466-635-3	Sequence 3, Appl
41	1263.5	46.8	452	3	US-09-027-449-71	Sequence 71, Appl
42	1263.5	46.8	452	3	US-09-026-985-71	Sequence 71, Appl
43	1263.5	46.8	452	3	US-09-121-952A-71	Sequence 71, Appl
44	1263.5	46.8	452	4	US-09-334-340A-71	Sequence 30, Appl
45	1263	46.7	472	4	US-09-301-593-30	Sequence 18, Appl
46	1262	46.7	451	2	US-08-887-352B-18	Sequence 18, Appl
47	1262	46.7	451	3	US-09-109-207C-18	Sequence 18, Appl
48	1262	46.7	451	3	US-09-282-505-2	Sequence 2, Appl
49	1262	46.7	451	3	US-09-054-255-2	Sequence 2, Appl
50	1262	46.7	451	3	US-09-296-005-18	Sequence 18, Appl
51	1262	46.7	451	4	US-09-282-846-2	Sequence 2, Appl
52	1262	46.7	451	4	US-09-680-145-2	Sequence 2, Appl
53	1262	46.7	451	4	US-09-920-171-18	Sequence 18, Appl
54	1261.5	46.7	467	3	US-09-049-672A-8	Sequence 8, Appl
55	1261	46.7	488	4	US-09-499-846-12	Sequence 12, Appl
56	1259	46.6	453	3	US-08-466-151-8	Sequence 8, Appl
57	1259	46.6	453	4	US-08-466-163B-8	Sequence 8, Appl
58	1259	46.6	453	4	US-09-802-096-8	Sequence 8, Appl
59	1259	46.6	476	2	US-08-378-939-10	Sequence 10, Appl
60	1259	46.6	478	3	US-08-487-550-8	Sequence 8, Appl
61	1259	46.6	478	4	US-09-526-098-8	Sequence 8, Appl
62	1258.5	46.6	497	4	US-09-499-846-10	Sequence 10, Appl
63	1258.5	46.6	525	4	US-09-499-846-8	Sequence 8, Appl
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65	1257	46.5	451	2	US-08-887-352B-16	Sequence 16, Appl
66	1257	46.5	451	3	US-08-466-151-65	Sequence 65, Appl
67	1257	46.5	451	3	US-09-109-207C-14	Sequence 14, Appl
68	1257	46.5	451	3	US-09-109-207C-16	Sequence 16, Appl
69	1257	46.5	451	3	US-09-296-005-14	Sequence 14, Appl
70	1257	46.5	451	3	US-09-296-005-16	Sequence 16, Appl
71	1257	46.5	451	4	US-09-920-171-14	Sequence 14, Appl
72	1257	46.5	451	4	US-09-920-171-16	Sequence 16, Appl
73	1257	46.5	472	4	US-08-793-450-8	Sequence 8, Appl
74	1256.5	46.5	472	4	US-09-301-593-43	Sequence 43, Appl
75	1255	46.4	462	4	US-09-289-942A-7	Sequence 7, Appl
76	1254.5	46.4	449	4	US-09-679-397-2	Sequence 2, Appl
77	1254.5	46.4	449	4	US-09-680-148-2	Sequence 2, Appl
78	1254.5	46.4	449	4	US-09-504-465A-2	Sequence 4, Appl
79	1248	46.2	476	3	US-08-487-550-4	Sequence 4, Appl
80	1248	46.2	476	4	US-09-526-098-4	Sequence 4, Appl
81	1240.5	45.9	951	4	US-09-313-942-9	Sequence 9, Appl
82	1238	45.8	442	5	US-08-472-888A-7	Sequence 7, Appl
83	1238	45.8	442	5	PCT-US96-10043-9	Sequence 9, Appl
84	1238	45.8	547	4	US-09-746-359A-54	Sequence 54, Appl
85	1238	45.8	571	1	US-09-746-359A-53	Sequence 53, Appl
86	1236.5	45.8	371	1	US-08-236-311-7	Sequence 7, Appl
87	1236.5	45.8	371	3	US-08-457-918-7	Sequence 7, Appl
88	1234.5	45.7	446	4	US-09-157-452B-12	Sequence 12, Appl
89	1232	45.6	704	4	US-09-590-656-2	Sequence 2, Appl
90	1232	45.6	704	4	US-09-733-764-2	Sequence 2, Appl
91	1226	45.4	442	1	US-08-461-968A-5	Sequence 5, Appl
92	1226	45.4	442	2	US-08-462-571-5	Sequence 5, Appl
93	1224	45.3	447	5	PCT-US96-10043-11	Sequence 11, Appl
94	1221.5	45.2	330	4	US-09-301-593-22	Sequence 22, Appl
95	1221	45.2	552	4	US-09-313-942-8	Sequence 8, Appl
96	1219	45.1	444	5	PCT-US95-03866-12	Sequence 12, Appl
97	1219	45.1	444	5	PCT-US95-03866-14	Sequence 14, Appl
98	1215	45.0	376	4	US-09-180-100-11	Sequence 11, Appl
99	1215	45.0	376	4	US-09-180-100-22	Sequence 22, Appl
100	1215	45.0	424	4	US-09-333-593A-8	Sequence 8, Appl

101 1212 44.9 311 3 US-09-178-869-2 Sequence 2, Appl1
102 1212 44.9 311 4 US-09-761-413-2 Sequence 2, Appl1
103 1211.5 44.8 232 2 US-08-595-043A-50 Sequence 50, Appl1
104 1211.5 44.8 336 2 US-08-784-512-3 Sequence 3, Appl1
105 1211.5 44.8 336 3 US-09-176-228-3 Sequence 7, Appl1
106 1211.5 44.8 859 4 US-09-313-942-7 Sequence 1, Appl1
107 1211.5 44.8 977 4 US-09-590-656-1 Sequence 1, Appl1
108 1211.5 44.8 977 4 US-09-733-764-1 Sequence 1, Appl1
109 1210 44.8 377 4 US-09-227-595-24 Sequence 24, Appl1
110 1207.5 44.7 552 1 US-08-243-010-6 Sequence 6, Appl1
111 1207 44.7 680 3 US-08-227-496C-15 Sequence 15, Appl1
112 1206.5 44.7 388 3 US-09-131-247-16 Sequence 16, Appl1
113 1205.5 44.6 664 3 US-08-957-063-16 Sequence 16, Appl1
114 1205.5 44.6 664 4 US-09-487-685-16 Sequence 16, Appl1
115 1205.5 44.6 664 4 US-08-802-805D-16 Sequence 16, Appl1
116 1205.5 44.6 911 2 US-08-484-438-10 Sequence 10, Appl1
117 1204.5 44.6 235 3 US-09-131-247-6 Sequence 6, Appl1
118 1204.5 44.6 389 3 US-09-131-247-14 Sequence 14, Appl1
119 1203.5 44.5 488 3 US-08-776-511-2 Sequence 2, Appl1
120 1203.5 44.5 559 4 US-09-746-359A-62 Sequence 62, Appl1
121 1203.5 44.5 534 4 US-09-746-359A-23 Sequence 23, Appl1
122 1203 44.5 387 1 US-08-470-299-4 Sequence 4, Appl1
123 1202 44.5 442 1 US-08-480-036-2 Sequence 2, Appl1
124 1202 44.5 442 1 US-08-461-968A-2 Sequence 2, Appl1
125 1202 44.5 442 2 US-08-462-571-2 Sequence 2, Appl1

ALIGNMENTS

RESULT 1
Sequence 2, Application US/08477460B

Patent No. 6034223

GENERAL INFORMATION:

APPLICANT: Progenics Pharmaceuticals, Inc.

TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED

TITLE OF INVENTION: CD4-GAMMA2 AND CD4-IGG2 IMMUNOCONJUGATES, AND USES THEREOF

NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESSES:

ADDRESSEE: Cooper & Dunham

STREET: 30 Rockefeller Plaza

CITY: New York

STATE: New York

COUNTRY: USA

ZIP: 10112

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.24

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/477,460B

FILING DATE: 07-JUN-1995

CLASSIFICATION: 530

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/927,931

FILING DATE: 07-AUG-1992

ATTORNEY/AGENT INFORMATION:

NAME: White, John P.

REGISTRATION NUMBER: 28,678

REFERENCE/DOCKET NUMBER: 41215-A-PCT/JWP/ALM

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 977-9550

TELEFAX: (212) 977-9809

TELEX: 422523 COOP UI

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 432 amino acids

TYPE: amino acid

STRANDEDNESS: unknown

TOPOLOGY: unknown

MOLECULE TYPE: protein

ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-08-477-460B-2

Query Match 78.5%; Score 2122; DB 3; length 432;

Best Local Similarity 91.2%; Pred. No. 7,4e-157;

Matches 405; Conservative 8; Mismatches 5; Indels 26; Gaps 2;

QY 1 MRGVPPFRLILVLOLALPPATQGNKVLGKGGDTVELCTASQKSIQFMKNSNQIK 60
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DB 61 ILGNQSSFLTKGSPSLNDRASRSRLMDQGNPLIKLKLTEDSDTYICEVDQKEEYVL 120
QY 121 LVFGLTANSDFLLQGGSLITLLESPPSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDFLLQGGSLITLLESPPSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 181 TWCTCVLQNKKEVERKIDIV-----PCPAEPPKSCDKTHTCPELGGPSVFL 227
DB 181 TWCTCVLQNKKEVERKIDIVLAFERKCCVECPCPAP-----VAGPSVFL 227
QY 228 PPPKRDITLMTSRTEPVTCVVVDVSHEDPEVKENYVGVGVHNAKTKPREQVNSTRV 287
DB 228 PPPKRDITLMTSRTEPVTCVVVDVSHEDPEVKENYVGVGVHNAKTKPREQVNSTRV 287
QY 288 VSVLTVLHQMVLNGEKYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDLTKNQ 347
DB 288 VSVLTVLHQMVLNGEKYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDLTKNQ 347
QY 348 VSLTLVKGFPYPSDIAVEMESNGQPENNYKTTIPVLDSDGSFPLYSKLTVDKSRNQGNV 407
DB 348 VSLTLVKGFPYPSDIAVEMESNGQPENNYKTTIPVLDSDGSFPLYSKLTVDKSRNQGNV 407
QY 408 FSCSVMEALHNHYTQKSLSLSPG 431
DB 408 FSCSVMEALHNHYTQKSLSLSPG 431

RESULT 2
US-08-379-516-2

Sequence 2, Application US/08379516

Patent No. 6083478

GENERAL INFORMATION:

APPLICANT: Allaway, Graham P.

TITLE OF INVENTION: Immunocnjugates and Uses Thereof

TITLE OF INVENTION: Immunocnjugates and Uses Thereof

FILE REFERENCE: 41215-A-PCT-US

CURRENT APPLICATION NUMBER: US/08/379,516

FILING DATE: 1996-06-10

EARLIER APPLICATION NUMBER: PCT/US93/07422

EARLIER FILING DATE: 1993-08-06

EARLIER APPLICATION NUMBER: 07/927,931

NUMBER OF SEQ ID NOS: 9

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 2

LENGTH: 432

TYPE: PRT

ORGANISM: Homo sapiens

US-08-379-516-2

Query Match 78.5%; Score 2122; DB 3; length 432;

Best Local Similarity 91.2%; Pred. No. 7,4e-157;

Matches 405; Conservative 8; Mismatches 5; Indels 26; Gaps 2;

QY 1 MRGVPPFRLILVLOLALPPATQGNKVLGKGGDTVELCTASQKSIQFMKNSNQIK 60
DB 1 MRGVPPFRLILVLOLALPPATQGNKVLGKGGDTVELCTASQKSIQFMKNSNQIK 60


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QY 61 ILGNQGSFLTKGSPSKINDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILGNQGSFLTKGSPSKINDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDDTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDDTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVTYLNQKQKVEFKIDIV-----PCPAPRPSKCDKHTHCTPELLGSPVFL 227
DB 181 TWTCVTYLNQKQKVEFKIDIVLAFFERKCCVECPCPAP-----VAGPSVFL 227
QY 228 FPKPKDITMISRTPEVTCVVVDVSHEDPEVKFMNYVDGVEVNAKTKPREEOYNSTYRV 287
DB 228 FPKPKDITMISRTPEVTCVVVDVSHEDPEVKFMNYVDGVEVNAKTKPREEOYNSTYRV 287
QY 288 VSVLTVLHODMLNGKCKVSNKGLPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQ 347
DB 288 VSVLTVLHODMLNGKCKVSNKGLPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQ 347
QY 348 VSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGSEFLYSKLTVDKSRMQQGNY 407
DB 348 VSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGSEFLYSKLTVDKSRMQQGNY 407
QY 408 FSCSVNHEALHNNHYTOKSLSLSPG 431
DB 408 FSCSVNHEALHNNHYTOKSLSLSPG 431

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RESULT 3

US-09-329-916-2.

Sequence 2, Application US/09329916

Patent No. 6177549

GENERAL INFORMATION:

APPLICANT: Progenics Pharmaceuticals, Inc.

TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONTINGATED

NUMBER OF SEQUENCES: CD4-GAMMA2 AND CD4-IGG2 IMMUNOCONJUGATES, AND USES THEREOF

CORRESPONDENCE ADDRESS:

ADDRESSEE: Cooper & Dunham

STREET: 30 Rockefeller Plaza

CITY: New York

STATE: New York

COUNTRY: USA

ZIP: 10112

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Releasee #1.24

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/329,916

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/477,460

FILING DATE: 07-JUN-1995

APPLICATION NUMBER: US 07/927,931

FILING DATE: 07-AUG-1992

ATTORNEY/AGENT INFORMATION:

NAME: White, John P.

REGISTRATION NUMBER: 28,678

REFERENCE/DOCKET NUMBER: 41215-A-PCT/JWP/LJM

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 977-9550

TELEFAX: (212) 977-9809

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 432 amino acids

TYPE: amino acid

STRANDEDNESS: unknown

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/ TOPOLOGY: unknown
/ MOLECULE TYPE: protein
/ ORIGINAL SOURCE:
/ ORGANISM: homo sapien
/ CELL TYPE: lymphocyte
/ US-09-329-916-2

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Query Match 78.5%; Score 2122; DB 3; Length 432;
Best Local Similarity 91.2%; Pred. No. 7,4e-157;
Matches 405; Conservative 8; Mismatches 5; Indels 26; Gaps 2;

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QY 1 MRNGVFRHLLVLAQALPAATQGNKVVLLGKKGDVETLCTASQKKSIOFHKNSNOIK 60
DB 1 MRNGVFRHLLVLAQALPAATQGNKVVLLGKKGDVETLCTASQKKSIOFHKNSNOIK 60
QY 61 ILGNQGSFLTKGSPSKINDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILGNQGSFLTKGSPSKINDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDDTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDDTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
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DB 181 TWTCVTYLNQKQKVEFKIDIVLAFFERKCCVECPCPAP-----VAGPSVFL 227
QY 228 FPKPKDITMISRTPEVTCVVVDVSHEDPEVKFMNYVDGVEVNAKTKPREEOYNSTYRV 287
DB 228 FPKPKDITMISRTPEVTCVVVDVSHEDPEVKFMNYVDGVEVNAKTKPREEOYNSTYRV 287
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DB 288 VSVLTVLHODMLNGKCKVSNKGLPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQ 347
QY 348 VSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGSEFLYSKLTVDKSRMQQGNY 407
DB 348 VSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGSEFLYSKLTVDKSRMQQGNY 407
QY 408 FSCSVNHEALHNNHYTOKSLSLSPG 431
DB 408 FSCSVNHEALHNNHYTOKSLSLSPG 431

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RESULT 4

US-08-485-372A-2

Sequence 2, Application US/08485372A

Patent No. 6187748

GENERAL INFORMATION:

APPLICANT: Beaudry, Gary A.

TITLE OF INVENTION: CD4-GAMMA2 CD4-IGG2 CHIMERAS

NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESS:

ADDRESSEE: Cooper & Dunham LLP

STREET: 1185 Avenue of the Americas

CITY: New York

STATE: New York

COUNTRY: USA

ZIP: 10036

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Releasee #1.24

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/485,372A

FILING DATE:

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/476,227

FILING DATE: 07-JUN-1995

ATTORNEY/AGENT INFORMATION:

NAME: White, John P.
 REGISTRATION NUMBER: 28,678
 REFERENCE/DOCKET NUMBER: 37690-II-A
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (212) 278-0400
 TELEFAX: (212) 391-0525
 TELEX:
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 432 amino acids
 TYPE: amino acid
 STRANDEDNESS: unknown
 TOPOLOGY: unknown
 MOLECULE TYPE: protein
 ORIGINAL SOURCE:
 ORGANISM: homo sapien
 CELL TYPE: lymphocyte
 US-08-485-372A-2

Query Match 78.5%; Score 2122; DB 3; Length 432;
 Best Local Similarity 91.2%; Pred. No. 7,4e-157;
 Matches 405; Conservative 8; Mismatches 5; Indels 26; Gaps 2;

QY 1 NMRGVPFRHLVLVLOLALPPATQGNKVLGKKGDTVELTCTASOKKSIOFHMKNQIX 60
 1 NMRGVPFRHLVLVLOLALPPATQGNKVLGKKGDTVELTCTASOKKSIOFHMKNQIX 60
 DB 1 NMRGVPFRHLVLVLOLALPPATQGNKVLGKKGDTVELTCTASOKKSIOFHMKNQIX 60
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 61 ILGNQGSFLTKGSPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVL 120
 DB 61 ILGNQGSFLTKGSPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVL 120
 QY 121 LVFGLTANSDTHLLOGSLTLTLESPPGSSPVQCSPPGKNIQGGKTLVSQLELDGSG 180
 121 LVFGLTANSDTHLLOGSLTLTLESPPGSSPVQCSPPGKNIQGGKTLVSQLELDGSG 180
 DB 121 LVFGLTANSDTHLLOGSLTLTLESPPGSSPVQCSPPGKNIQGGKTLVSQLELDGSG 180
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 181 TWTCVLQNOQKVEFKIDIV-----PCPAPPKSCDKTHTCPELLGSPVFL 227
 DB 181 TWTCVLQNOQKVEFKIDIVLVAFERKCCVECPCPAP-----VAGSPVFL 227
 QY 228 PPPKPKDTLMSRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNAKTKRREQNSTYRV 287
 228 PPPKPKDTLMSRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNAKTKRREQNSTYRV 287
 DB 228 PPPKPKDTLMSRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNAKTKRREQNSTYRV 287
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 DB 288 VSVLTVLVHODMNGEKYKCKVSNKALPAPIETKISKAKGQPREPOVYTLPPSRDELTKNQ 347
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 348 VSLTCLVKGFPYSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDSKRMQGNV 407
 DB 348 VSLTCLVKGFPYSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDSKRMQGNV 407
 QY 408 FSCSVMEHALHNHYTQKSLSLSPG 431
 408 FSCSVMEHALHNHYTQKSLSLSPG 431
 DB 408 FSCSVMEHALHNHYTQKSLSLSPG 431

RESULT 5
 US-09-409-006A-2
 ; Sequence 2, Application US/09409006A
 ; Patent No. 6342586
 ; GENERAL INFORMATION:
 ; APPLICANT: Progenics Pharmaceuticals, Inc.
 ; TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
 ; TITLE OF INVENTION: CD4-GAMMA2 AND CD4-IgG2 IMMUNOCONJUGATES, AND USES THEREOF
 ; NUMBER OF SEQUENCES: 9
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Cooper & Dunham
 ; STREET: 30 Rockefeller Plaza
 ; CITY: New York
 ; STATE: New York
 ; COUNTRY: USA
 ; ZIP: 10112
 ; COMPUTER READABLE FORM:

MEDIUM TYPE: floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent Release #1.24
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/409,006A
 FILING DATE: 29-SEP-1999
 CLASSIFICATION: 424
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/927,931
 FILING DATE: 07-AUG-1992
 ATTORNEY/AGENT INFORMATION:
 NAME: White, John P.
 REGISTRATION NUMBER: 28,678
 REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPM/AJM
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (212) 977-9550
 TELEFAX: (212) 977-9809
 TELEX: 422523 COOP UI
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 432 amino acids
 TYPE: amino acid
 STRANDEDNESS: unknown
 TOPOLOGY: unknown
 MOLECULE TYPE: protein
 ORIGINAL SOURCE:
 ORGANISM: homo sapien
 CELL TYPE: lymphocyte
 US-09-409-006A-2

Query Match 78.5%; Score 2122; DB 4; Length 432;
 Best Local Similarity 91.2%; Pred. No. 7,4e-157;
 Matches 405; Conservative 8; Mismatches 5; Indels 26; Gaps 2;

QY 1 NMRGVPFRHLVLVLOLALPPATQGNKVLGKKGDTVELTCTASOKKSIOFHMKNQIX 60
 1 NMRGVPFRHLVLVLOLALPPATQGNKVLGKKGDTVELTCTASOKKSIOFHMKNQIX 60
 DB 1 NMRGVPFRHLVLVLOLALPPATQGNKVLGKKGDTVELTCTASOKKSIOFHMKNQIX 60
 QY 61 ILGNQGSFLTKGSPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVL 120
 61 ILGNQGSFLTKGSPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVL 120
 DB 61 ILGNQGSFLTKGSPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVL 120
 QY 121 LVFGLTANSDTHLLOGSLTLTLESPPGSSPVQCSPPGKNIQGGKTLVSQLELDGSG 180
 121 LVFGLTANSDTHLLOGSLTLTLESPPGSSPVQCSPPGKNIQGGKTLVSQLELDGSG 180
 DB 121 LVFGLTANSDTHLLOGSLTLTLESPPGSSPVQCSPPGKNIQGGKTLVSQLELDGSG 180
 QY 181 TWTCVLQNOQKVEFKIDIV-----PCPAPPKSCDKTHTCPELLGSPVFL 227
 181 TWTCVLQNOQKVEFKIDIVLVAFERKCCVECPCPAP-----VAGSPVFL 227
 DB 181 TWTCVLQNOQKVEFKIDIVLVAFERKCCVECPCPAP-----VAGSPVFL 227
 QY 228 PPPKPKDTLMSRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNAKTKRREQNSTYRV 287
 228 PPPKPKDTLMSRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNAKTKRREQNSTYRV 287
 DB 228 PPPKPKDTLMSRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNAKTKRREQNSTYRV 287
 QY 288 VSVLTVLVHODMNGEKYKCKVSNKALPAPIETKISKAKGQPREPOVYTLPPSRDELTKNQ 347
 288 VSVLTVLVHODMNGEKYKCKVSNKALPAPIETKISKAKGQPREPOVYTLPPSRDELTKNQ 347
 DB 288 VSVLTVLVHODMNGEKYKCKVSNKALPAPIETKISKAKGQPREPOVYTLPPSRDELTKNQ 347
 QY 348 VSLTCLVKGFPYSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDSKRMQGNV 407
 348 VSLTCLVKGFPYSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDSKRMQGNV 407
 DB 348 VSLTCLVKGFPYSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDSKRMQGNV 407
 QY 408 FSCSVMEHALHNHYTQKSLSLSPG 431
 408 FSCSVMEHALHNHYTQKSLSLSPG 431
 DB 408 FSCSVMEHALHNHYTQKSLSLSPG 431

RESULT 6
 US-08-484-681-2
 ; Sequence 2, Application US/08484681
 ; Patent No. 6451313
 ; GENERAL INFORMATION:

APPLICANT: Beaudry, Gary A.
APPLICANT: Maddon, Paul J.
TITLE OF INVENTION: CD4-GAMMA2 CD4-IgG2 CHIMERAS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham LLP
STREET: 1185 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/484,681
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 37690-II-B
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 278-0400
TELEFAX: (212) 391-0525
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-08-484-681-2

Query Match 78.5%; Score 2122; DB 4; Length 432;
Best Local Similarity 91.2%; Pred. No. 7.4e-157;
Matches 405; Conservative 8; Mismatches 5; Indels 26; Gaps 2;

QY 1 MNRGVPRHLLVQLALLPAATQGNKVVLGKGDVVELTCTASQKKSIOFHKNSQIK 60
DB 1 MNRGVPRHLLVQLALLPAATQGNKVVLGKGDVVELTCTASQKKSIOFHKNSQIK 60
QY 61 ILGNQSFLLTKGSKLNDRAISRSLMDQGNFPLIINKLIEBDDTYICEVEDQKEEVOL 120
DB 61 ILGNQSFLLTKGSKLNDRAISRSLMDQGNFPLIINKLIEBDDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSPTHLLOQOSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSPTHLLOQOSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCYVLQONQKVEFKIDIV-----PCPAPEPKSCDKHTTCELLGGSVFL 227
DB 181 TWTCYVLQONQKVEFKIDIV-----PCPAPEPKSCDKHTTCELLGGSVFL 227
QY 228 FPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFMWYVDGVEVNAKTKPREEOYNSTYRV 287
DB 228 FPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFMWYVDGVEVNAKTKPREEOYNSTYRV 287
QY 288 VSVLTVLHODMLNKEKVKCKVSNKALPALEKTIISKAKGPREPOVYTLPSRDELTKNQ 347
DB 288 VSVLTVLHODMLNKEKVKCKVSNKALPALEKTIISKAKGPREPOVYTLPSRDELTKNQ 347
QY 348 VSLTCLVKGFPSPSIAVEMBSNGOPENNYKTPPVLDDSDGSFFLYSLTYDKSRMOQGNV 407
DB 348 VSLTCLVKGFPSPSIAVEMBSNGOPENNYKTPPVLDDSDGSFFLYSLTYDKSRMOQGNV 407
QY 408 FSCSVNHEALHNHYTKSLSLSPG 431

DB 408 FSCSVNHEALHNHYTKSLSLSPG 431

RESULT 7
PCT-US93-07422-2
Sequence 2, Application PC/RUS9307422
GENERAL INFORMATION:
APPLICANT: Progenics Pharmaceuticals, Inc.
TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10112
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/07422
FILING DATE: 19930806
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/927,931
FILING DATE: 07-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPW/AJM
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 977-9550
TELEFAX: (212) 977-9809
TELEX: 422523 COOP UT
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
PCT-US93-07422-2

Query Match 78.5%; Score 2122; DB 5; Length 432;
Best Local Similarity 91.2%; Pred. No. 7.4e-157;
Matches 405; Conservative 8; Mismatches 5; Indels 26; Gaps 2;

QY 1 MNRGVPRHLLVQLALLPAATQGNKVVLGKGDVVELTCTASQKKSIOFHKNSQIK 60
DB 1 MNRGVPRHLLVQLALLPAATQGNKVVLGKGDVVELTCTASQKKSIOFHKNSQIK 60
QY 61 ILGNQSFLLTKGSKLNDRAISRSLMDQGNFPLIINKLIEBDDTYICEVEDQKEEVOL 120
DB 61 ILGNQSFLLTKGSKLNDRAISRSLMDQGNFPLIINKLIEBDDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSPTHLLOQOSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSPTHLLOQOSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCYVLQONQKVEFKIDIV-----PCPAPEPKSCDKHTTCELLGGSVFL 227
DB 181 TWTCYVLQONQKVEFKIDIV-----PCPAPEPKSCDKHTTCELLGGSVFL 227
QY 228 FPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFMWYVDGVEVNAKTKPREEOYNSTYRV 287
DB 228 FPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFMWYVDGVEVNAKTKPREEOYNSTYRV 287

Db 228 PEPKPKDTLMISRTPEVTCVVDVSHEDPEVQFNWYDVGVHNAKTPREQFNSTPRV 287
Qy 288 VSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISKAKGPPEPVYTLPPSRDELTKNQ 347
Db 288 VSVLTVLHODWLNKGEYKCKVSNKGLPAPIEKTISKAKGPPEPVYTLPPSRDEMTKNQ 347
Qy 348 VSVLTCLVKGFPSPDIIVAVESNQGPENNYKTPPVLDSDGSFFLYSKLTVDSKRMQGNV 407
Db 348 VSVLTCLVKGFPSPDIIVAVESNQGPENNYKTPPVLDSDGSFFLYSKLTVDSKRMQGNV 407
Qy 408 FSCSVMEALHNHYTQKSLSLSPG 431
Db 408 FSCSVMEALHNHYTQKSLSLSPG 431

RESULT 8
US-08-472-888A-6
; Sequence 6, Application US/08472888A
; Patent No. 6613746
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; APPLICANT: Walz, Gerd
; TITLE OF INVENTION: AGP-ANTIBODY FUSION PROTEINS
; TITLE OF INVENTION: AGP-ANTIBODY FUSION PROTEINS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elding LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/472,888A
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/618,314
; FILING DATE: 23-NOV-1990
; ATTORNEY/AGENT INFORMATION:
; NAME: Elding, Karen L.
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/258001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
; TELEX:
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 630 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-472-888A-6

Query Match 77.4%; Score 2092; DB 4; Length 630;
Best Local Similarity 67.2%; Pred. No. 2.7e-154;
Matches 424; Conservative 0; Mismatches 5; Indels 202; Gaps 5;

Qy 1 MNRGVFPRHLLVLOLALLPAATQGNKVVLGKGGDTVELCTASQKKSIOFHKNKSNQIK 60
Db 1 MNRGVFPRHLLVLOLALLPAATQGNKVVLGKGGDTVELCTASQKKSIOFHKNKSNQIK 60
Qy 61 ILGNQGSFLTKGSPSKLNDRASSRSIWDQGNFPLIINKLKIEDSDTYICEVEDQKEEYOL 120
Db 61 ILGNQGSFLTKGSPSKLNDRASSRSIWDQGNFPLIINKLKIEDSDTYICEVEDQKEEYOL 120

Qy 121 LVFGLTANSDPHLLOGOSLTLTLSEPPGSSPSPVOCSPRGKNIQSGKTLVSQLELODSG 180
Db 121 LVFGLTANSDPHLLOGOSLTLTLSEPPGSSPSPVOCSPRGKNIQSGKTLVSQLELODSG 180
Qy 181 TWCTVTLNOKKVEKIDIV----- 200
Db 181 TWCTVTLNOKKVEKIDIVLAFQKASSIYKKEGEVEFSAFLAFVEKLTGSGELMW 240
Qy 201 ----- 200
Db 241 QAERASSKSWITPDLNKEVSVKRVTDPKLQMGKLLPLHLTPQALPQVAGSGLTLA 300
Qy 201 ----- 200
Db 301 LEAKTGKLGHOEVNVLVMAATOLQKNLTCEWGPSTPKMLSLIKENKANKSKREKPVV 360
Qy 201 -----PC-----PAPERKSCDKHTC-----PELT 220
Db 361 LNPEAGMMQCLSDSGVLLBSNLIKVLPTWSTPVHADPEGEPSCKDHTCPCPAPELL 420
Qy 221 GGPSTVFLPEPKPKDTLMISRTPEVTCVVDVSHEDPEVQFNWYDVGVHNAKTPREBQ 280
Db 421 GGPSTVFLPEPKPKDTLMISRTPEVTCVVDVSHEDPEVQFNWYDVGVHNAKTPREBQ 479
Qy 281 YNSTRVSVTLVLHODWLNKGEYKCKVSNKALPAPIEKTISKAKGPPEPVYTLPPSR 340
Db 480 YNSTRVSVTLVLHODWLNKGEYKCKVSNKALPAPIEKTISKAKGPPEPVYTLPPSR 538
Qy 341 DELTNGQVSLTCLVKGFPSPDIIVAVESNQGPENNYKTPPVLDSDGSFFLYSKLTVDS 400
Db 539 DELTNGQVSLTCLVKGFPSPDIIVAVESNQGPENNYKTPPVLDSDGSFFLYSKLTVDS 598
Qy 401 RWQGNVSCSVMEALHNHYTQKSLSLSPG 431
Db 599 RWQGNVSCSVMEALHNHYTQKSLSLSPG 629

RESULT 9
US-08-477-460B-4
; Sequence 4, Application US/08477460B
; Patent No. 6034223
; GENERAL INFORMATION:
; APPLICANT: Progenics Pharmaceuticals, Inc.
; TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
; TITLE OF INVENTION: CD4-GAMMA2 AND CD4-IGG2 IMMUNOCONJUGATES, AND USES THEREOF
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooper & Dunham
; STREET: 30 Rockefeller Plaza
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10112
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentia Release #1.24
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/477,460B
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/927,931
; FILING DATE: 07-AUG-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPN/AJM
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 977-9550
; TELEFAX: (212) 977-9809
; TELEX: 422523 COOP UI

; INFORMATION FOR SEQ ID NO: 4:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 530 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: unknown
 ; TOPOLOGY: unknown
 ; MOLECULE TYPE: cDNA
 ; ORIGINAL SOURCE:
 ; ORGANISM: homo sapien
 ; CELL TYPE: lymphocyte
 US-08-477-4608-4

Query Match 77.2%; Score 2085; DB 3; Length 530;
 Best Local Similarity 77.3%; Pred. No. 7,4e-154;
 Matches 409; Conservative 9; Mismatches 13; Indels 98; Gaps 4;

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QY 1 MNRGVPRRLHLVLQALLPAATQGNKVLGKGDVLTCTASQKSIQFHMKNNSQIK 60
DB 1 MNRGVPRRLHLVLQALLPAATQGNKVLGKGDVLTCTASQKSIQFHMKNNSQIK 60
QY 61 ILGNQGSFLTKGSPKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEVOL 120
DB 61 ILGNQGSFLTKGSPKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEVOL 120
QY 121 LVFGLTANSPTHLHQQSLTLTLSPSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSPTHLHQQSLTLTLSPSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVLQNGKQVEFKIDIV-----PCPA-----PEP 207
DB 181 TWTCVLQNGKQVEFKIDIV-----PCPA-----PEP 207
QY 208 ----- 207
DB 208 ----- 207
QY 241 VVWSNMSGALTSVHTFPVAVLQSSGLYSLSVTVTPSSNFGTQTYTCNVDHKSNTKYDK 300
DB 241 VVWSNMSGALTSVHTFPVAVLQSSGLYSLSVTVTPSSNFGTQTYTCNVDHKSNTKYDK 300
QY 208 ----KSCDKHTHCP-ELLGSPSVFLPPPKKDTLMI SRPEVTCVVDVSHEDPEVFNW 262
DB 208 ----KSCDKHTHCP-ELLGSPSVFLPPPKKDTLMI SRPEVTCVVDVSHEDPEVFNW 262
QY 301 TVERKCCVECPAPVAGSVFLFPKPKDTLMI SRPEVTCVVDVSHEDPEVFNW 360
DB 301 TVERKCCVECPAPVAGSVFLFPKPKDTLMI SRPEVTCVVDVSHEDPEVFNW 360
QY 263 YVDCVEVHNAKTKPREQVNSTRVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTIS 322
DB 263 YVDCVEVHNAKTKPREQVNSTRVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTIS 322
QY 361 YVDCVEVHNAKTKPREQVNSTRVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTIS 420
DB 361 YVDCVEVHNAKTKPREQVNSTRVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTIS 420
QY 323 KAKQPREPOVYTLPPSRDELTKNOVSLTCLVGFYPSDIAVEMESNGOPENNYKTPPV 382
DB 323 KAKQPREPOVYTLPPSRDELTKNOVSLTCLVGFYPSDIAVEMESNGOPENNYKTPPV 382
QY 421 KTKQPREPOVYTLPPSRDELTKNOVSLTCLVGFYPSDIAVEMESNGOPENNYKTPPV 480
DB 421 KTKQPREPOVYTLPPSRDELTKNOVSLTCLVGFYPSDIAVEMESNGOPENNYKTPPV 480
QY 383 LQSDGSFFLYSKLTVDKSRMQGNVFCSVMEHALHNHYTKSLSPG 431
DB 383 LQSDGSFFLYSKLTVDKSRMQGNVFCSVMEHALHNHYTKSLSPG 431
QY 481 LQSDGSFFLYSKLTVDKSRMQGNVFCSVMEHALHNHYTKSLSPG 529
DB 481 LQSDGSFFLYSKLTVDKSRMQGNVFCSVMEHALHNHYTKSLSPG 529

```

RESULT 10
 ; Sequence 4, Application US/08379516
 ; Patent No. 6083478
 ; GENERAL INFORMATION:
 ; APPLICANT: Allaway, Graham P.
 ; APPLICANT: Maddon, Paul J.
 ; TITLE OF INVENTION: No. 6083478-Peptideyl Molecety-Conjugated CD4-Gamma2 and CD4-IgG2
 ; TITLE OF INVENTION: Immunocjugates and Uses Thereof
 ; FILE REFERENCE: 41215-A-PCT-US
 ; CURRENT APPLICATION NUMBER: US/08/379,516
 ; CURRENT FILING DATE: 1996-06-10
 ; EARLIER APPLICATION NUMBER: PCT/US93/07422
 ; EARLIER FILING DATE: 1993-08-06
 ; EARLIER APPLICATION NUMBER: 07/927,931
 ; EARLIER FILING DATE: 1992-08-07
 ; NUMBER OF SEQ ID NOS: 9
 ; SOFTWARE: Patentin Ver. 2.1
 ; SEQ ID NO 4
 ; LENGTH: 530

; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-08-379-516-4

Query Match 77.2%; Score 2085; DB 3; Length 530;
 Best Local Similarity 77.3%; Pred. No. 7,4e-154;
 Matches 409; Conservative 9; Mismatches 13; Indels 98; Gaps 4;

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QY 1 MNRGVPRRLHLVLQALLPAATQGNKVLGKGDVLTCTASQKSIQFHMKNNSQIK 60
DB 1 MNRGVPRRLHLVLQALLPAATQGNKVLGKGDVLTCTASQKSIQFHMKNNSQIK 60
QY 61 ILGNQGSFLTKGSPKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEVOL 120
DB 61 ILGNQGSFLTKGSPKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEVOL 120
QY 121 LVFGLTANSPTHLHQQSLTLTLSPSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSPTHLHQQSLTLTLSPSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVLQNGKQVEFKIDIV-----PCPA-----PEP 207
DB 181 TWTCVLQNGKQVEFKIDIV-----PCPA-----PEP 207
QY 208 ----- 207
DB 208 ----- 207
QY 241 VVWSNMSGALTSVHTFPVAVLQSSGLYSLSVTVTPSSNFGTQTYTCNVDHKSNTKYDK 300
DB 241 VVWSNMSGALTSVHTFPVAVLQSSGLYSLSVTVTPSSNFGTQTYTCNVDHKSNTKYDK 300
QY 208 ----KSCDKHTHCP-ELLGSPSVFLPPPKKDTLMI SRPEVTCVVDVSHEDPEVFNW 262
DB 208 ----KSCDKHTHCP-ELLGSPSVFLPPPKKDTLMI SRPEVTCVVDVSHEDPEVFNW 262
QY 301 TVERKCCVECPAPVAGSVFLFPKPKDTLMI SRPEVTCVVDVSHEDPEVFNW 360
DB 301 TVERKCCVECPAPVAGSVFLFPKPKDTLMI SRPEVTCVVDVSHEDPEVFNW 360
QY 263 YVDCVEVHNAKTKPREQVNSTRVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTIS 322
DB 263 YVDCVEVHNAKTKPREQVNSTRVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTIS 322
QY 361 YVDCVEVHNAKTKPREQVNSTRVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTIS 420
DB 361 YVDCVEVHNAKTKPREQVNSTRVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTIS 420
QY 323 KAKQPREPOVYTLPPSRDELTKNOVSLTCLVGFYPSDIAVEMESNGOPENNYKTPPV 382
DB 323 KAKQPREPOVYTLPPSRDELTKNOVSLTCLVGFYPSDIAVEMESNGOPENNYKTPPV 382
QY 421 KTKQPREPOVYTLPPSRDELTKNOVSLTCLVGFYPSDIAVEMESNGOPENNYKTPPV 480
DB 421 KTKQPREPOVYTLPPSRDELTKNOVSLTCLVGFYPSDIAVEMESNGOPENNYKTPPV 480
QY 383 LQSDGSFFLYSKLTVDKSRMQGNVFCSVMEHALHNHYTKSLSPG 431
DB 383 LQSDGSFFLYSKLTVDKSRMQGNVFCSVMEHALHNHYTKSLSPG 431
QY 481 LQSDGSFFLYSKLTVDKSRMQGNVFCSVMEHALHNHYTKSLSPG 529
DB 481 LQSDGSFFLYSKLTVDKSRMQGNVFCSVMEHALHNHYTKSLSPG 529

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RESULT 11
 ; Sequence 4, Application US/09329916
 ; Patent No. 6177549
 ; GENERAL INFORMATION:
 ; APPLICANT: Progenics Pharmaceuticals, Inc.
 ; TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
 ; NUMBER OF SEQUENCES: 9
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Cooper & Dunham
 ; STREET: 30 Rockefeller Plaza
 ; CITY: New York
 ; STATE: New York
 ; COUNTRY: USA
 ; ZIP: 10112
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentin Release #1.24
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/329,916
 ; FILING DATE:
 ; CLASSIFICATION:
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 08/477,460
 ; FILING DATE: 07-JUN-1995

APPLICATION NUMBER: US 07/927,931
 FILING DATE: 07-AUG-1992
 ATTORNEY/AGENT INFORMATION:
 NAME: White, John P.
 REGISTRATION NUMBER: 28,678
 REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPM/AJM
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (212) 977-9550
 TELEFAX: (212) 977-9809
 TELEX: 422523 COOP UI
 INFORMATION FOR SEQ ID NO: 4:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 530 amino acids
 TYPE: amino acid
 STRANDEDNESS: unknown
 TOPOLOGY: unknown
 MOLECULE TYPE: CDNA
 ORIGINAL SOURCE:
 ORGANISM: homo sapien
 CELL TYPE: lymphocyte
 US-09-329-916-4

Query Match 77.2%; Score 2085; DB 3; Length 530;
 Best Local Similarity 77.3%; Pred. No. 7.4e-154;
 Matches 409; Conservative 9; Mismatches 13; Indels 98; Gaps 4;

QY 1 NMRGVFPHLLLVLOLALPPAATQGNKVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
 DB 1 NMRGVFPHLLLVLOLALPPAATQGNKVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
 QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIIKNKIEDSDTYICEVEDQKEEYOL 120
 DB 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIIKNKIEDSDTYICEVEDQKEEYOL 120
 QY 121 LVFGILTANSDTHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGILTANSDTHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 121 LVFGILTANSDTHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGILTANSDTHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWTCVTYLNQKKVEFKIDIV-----PCPA-----PEP 207
 DB 181 TWTCVTYLNQKKVEFKIDIV-----PCPA-----PEP 207
 QY 208 -----PCPA-----PEP 207
 DB 208 -----PCPA-----PEP 207
 QY 241 VTVSNNSGALTSQVHTFPAVLQSSGLYSLSVTVVSSNFGTQTYTCNVNDHKPSNTKDX 300
 DB 241 VTVSNNSGALTSQVHTFPAVLQSSGLYSLSVTVVSSNFGTQTYTCNVNDHKPSNTKDX 300
 QY 208 ----KSCDKHTPC-ELLGSPSVFLPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKFNW 262
 DB 301 TVERKCCVCEPCPAPVAGPSVFLPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKFNW 360
 QY 263 YVDGVEVHNAKTKPREEOYNSTFRVSVLTVLHODMLNGKEYCKVSNKGLPAPIEKTIS 322
 DB 361 YVDGVEVHNAKTKPREEOYNSTFRVSVLTVLHODMLNGKEYCKVSNKGLPAPIEKTIS 420
 QY 323 KAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPV 382
 DB 421 KTKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPV 480
 QY 383 LQSDGSFPLYSKLTVDKSRMNOGVPSCSMHEALHNYTQKSLSPG 431
 DB 481 LQSDGSFPLYSKLTVDKSRMNOGVPSCSMHEALHNYTQKSLSPG 529

RESULT 12
 US-08-485-372A-4
 ; Sequence 4, Application US/08485372A
 ; Patent No. 6187748
 ; GENERAL INFORMATION:
 ; APPLICANT: Beaudry, Gary A.
 ; APPLICANT: Maddon, Paul J.
 ; TITLE OF INVENTION: CD4-GAMMA2 CD4-1G62 CHIMERAS
 ; NUMBER OF SEQUENCES: 9
 ; CORRESPONDENCE ADDRESS:

ADDRESSEE: Cooper & Dunham LLP
 STREET: 1185 Avenue of the Americas
 CITY: New York
 STATE: New York
 COUNTRY: USA
 ZIP: 10036
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.24
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/485,372A
 FILING DATE:
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 08/476,227
 FILING DATE: 07-JUN-1995
 ATTORNEY/AGENT INFORMATION:
 NAME: White, John P.
 REGISTRATION NUMBER: 28,678
 REFERENCE/DOCKET NUMBER: 37690-II-A
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (212) 278-0400
 TELEFAX: (212) 391-0525
 TELEX:
 INFORMATION FOR SEQ ID NO: 4:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 530 amino acids
 TYPE: amino acid
 STRANDEDNESS: unknown
 TOPOLOGY: unknown
 MOLECULE TYPE: CDNA
 ORIGINAL SOURCE:
 ORGANISM: homo sapien
 CELL TYPE: lymphocyte
 US-08-485-372A-4

Query Match 77.2%; Score 2085; DB 3; Length 530;
 Best Local Similarity 77.3%; Pred. No. 7.4e-154;
 Matches 409; Conservative 9; Mismatches 13; Indels 98; Gaps 4;

QY 1 NMRGVFPHLLLVLOLALPPAATQGNKVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
 DB 1 NMRGVFPHLLLVLOLALPPAATQGNKVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
 QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIIKNKIEDSDTYICEVEDQKEEYOL 120
 DB 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIIKNKIEDSDTYICEVEDQKEEYOL 120
 QY 121 LVFGILTANSDTHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGILTANSDTHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 121 LVFGILTANSDTHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGILTANSDTHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWTCVTYLNQKKVEFKIDIV-----PCPA-----PEP 207
 DB 181 TWTCVTYLNQKKVEFKIDIV-----PCPA-----PEP 207
 QY 208 -----PCPA-----PEP 207
 DB 208 -----PCPA-----PEP 207
 QY 241 VTVSNNSGALTSQVHTFPAVLQSSGLYSLSVTVVSSNFGTQTYTCNVNDHKPSNTKDX 300
 DB 241 VTVSNNSGALTSQVHTFPAVLQSSGLYSLSVTVVSSNFGTQTYTCNVNDHKPSNTKDX 300
 QY 208 ----KSCDKHTPC-ELLGSPSVFLPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKFNW 262
 DB 301 TVERKCCVCEPCPAPVAGPSVFLPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKFNW 360
 QY 263 YVDGVEVHNAKTKPREEOYNSTFRVSVLTVLHODMLNGKEYCKVSNKGLPAPIEKTIS 322
 DB 361 YVDGVEVHNAKTKPREEOYNSTFRVSVLTVLHODMLNGKEYCKVSNKGLPAPIEKTIS 420
 QY 323 KAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPV 382
 DB 421 KTKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPV 480

Qy 383 LDDSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTOKSLSPG 431
Db 481 LDDSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTOKSLSPG 529

RESULT 13
US-09-409-006A-4
Sequence 4, Application US/09409006A
Patent No. 6342586
GENERAL INFORMATION:
APPLICANT: Progenics Pharmaceuticals, Inc.
TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
NUMBER OF SEQUENCES: 9
CD4-GAMMA2 AND CD4-19G2 IMMUNOCONJUGATES, AND USES THEREOF
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10112

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/409,006A
FILING DATE: 29-SEP-1999
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/927,931
FILING DATE: 07-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPW/AJM
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 977-9550
TELEFAX: (212) 977-9809
TELEX: 422523 COOP UI
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 530 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-09-409-006A-4

Query Match 77.2%; Score 2085; DB 4; Length 530;
Best Local Similarity 77.3%; Pred. No. 7,4e-154;
Matches 409; Conservative 9; Mismatches 13; Indels 98; Gaps 4;

Qy 1 MNRGVPFRHLVLVQLALPPATQGNKVVLGKGGDTVELTCTASOKKSIOFHMKNNOIK 60
Db 1 MNRGVPFRHLVLVQLALPPATQGNKVVLGKGGDTVELTCTASOKKSIOFHMKNNOIK 60

Qy 61 ILGNQGSFLTKGPKSLNDRADSRSLWDQGNFPLIINLKIEDSDYICEVEDQKEVOL 120
Db 61 ILGNQGSFLTKGPKSLNDRADSRSLWDQGNFPLIINLKIEDSDYICEVEDQKEVOL 120

Qy 121 LVFELTANSDTHLLOQGSILTLTLESPPGSSPSVQCSPRGKNIQGGKTLVSQLELDQSG 180
Db 121 LVFELTANSDTHLLOQGSILTLTLESPPGSSPSVQCSPRGKNIQGGKTLVSQLELDQSG 180

Qy 181 TWTTCTVLQONQKKEFKIDIV-----PCPA-----PEP 207
Db 181 TWTTCTVLQONQKKEFKIDIVLFASTKGPVFLADCSRSTSESTAALCLVVDYFEP 240

Qy 208 ----- 207
Db 241 VTVMNMGALTSQVHTFPAVLQSSGLXSLSSVTVPESSNFGOTQTYTCNDHKBKNTKYDK 300

Qy 208 ----KSCDKTHYCP-ELLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW 262
Db 301 TVERKCCVECPKCPAPVAGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVQFNW 360

Qy 263 YVQGVENHNAKTYPREQVNSTRVVSVLTVLHODMUNGKVEYCKKNKALPAIEKTIIS 322
Db 361 YVQGVENHNAKTYPREQVNSTRVVSVLTVLHODMUNGKVEYCKKNKALPAIEKTIIS 420

Qy 323 KAKQPREPOVYTLPPSRDELTKQVSLTCLVKGFPYSDIAVEMESNGOPENNYKTTIPV 382
Db 421 KTKQPREPOVYTLPPSRDELTKQVSLTCLVKGFPYSDIAVEMESNGOPENNYKTTIPV 480

Qy 383 LDDSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTOKSLSPG 431
Db 481 LDDSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTOKSLSPG 529

RESULT 14
US-08-484-681-4
Sequence 4, Application US/08484681
Patent No. 6451313
GENERAL INFORMATION:
APPLICANT: Beaudry, Gary A.
TITLE OF INVENTION: CD4-GAMMA2 CD4-19G2 CHIMERAS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham LLP
STREET: 1185 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/484,681
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 37690-II-B
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 278-0400
TELEFAX: (212) 391-0525
TELEX:
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 530 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-08-484-681-4

Query Match 77.2%; Score 2085; DB 4; Length 530;
Best Local Similarity 77.3%; Pred. No. 7,4e-154;
Matches 409; Conservative 9; Mismatches 13; Indels 98; Gaps 4;

Qy 1 MNRGVPFRHLVLVQLALPPATQGNKVVLGKGGDTVELTCTASOKKSIOFHMKNNOIK 60
Db 1 MNRGVPFRHLVLVQLALPPATQGNKVVLGKGGDTVELTCTASOKKSIOFHMKNNOIK 60

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Db      1  MRGVPFRHLLVLQALLPAAATGKQKVVLGKKGDVVELCTASQKKSIOFMKNSNOIK 60
QY      61  ILGNQGSFLTKGSPSKLNDRADSRSLMDQGNFPLIIKLIKIEDSDTYICEVEDQKEEVOL 120
Db      61  ILGNQGSFLTKGSPSKLNDRADSRSLMDQGNFPLIIKLIKIEDSDTYICEVEDQKEEVOL 120
QY      121  LVFGLTANSDFHLLQGSLLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
Db      121  LVFGLTANSDFHLLQGSLLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY      181  TWTCTVLQNKQKVEKIDIV-----PCPA-----PEP 207
Db      181  TWTCTVLQNKQKVEKIDIVLAFASTKGPSVFLAPCSRSTSESTALGCLVKDYFPEP 240
QY      208  ----- 207
Db      241  VIVSNMNGALTSQVHTFPAVLQSSGLSYLSVTVTPSSNFGTQTYTCNVDHKPSNTKVDK 300
QY      208  ---KSCDKHTICP-ELIGSPSVFLFPKPKDITMISRTPEVTCVVDVSHEDPEVKFNW 262
Db      301  TVERKCCVCEPCPAPVAGPSVFLFPKPKDITMISRTPEVTCVVDVSHEDPEVKFNW 360
QY      263  YVDGVEVHNAKTPREEOYNSTFRVSVLTVLHQMNLNGEKYCKVSNKALPAPIEKTIS 322
Db      361  YVDGVEVHNAKTPREEOYNSTFRVSVLTVLHQMNLNGEKYCKVSNKALPAPIEKTIS 420
QY      323  KAKGPREPOVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMWSNGQPENNYKTTTPV 382
Db      421  KTKGPREPOVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMWSNGQPENNYKTTTPV 480
QY      383  LDSGSEFLYSKLTVDKSRMOQGNVSCSVMEALHNNHTOKSLSLSPG 431
Db      481  LDSGSEFLYSKLTVDKSRMOQGNVSCSVMEALHNNHTOKSLSLSPG 529

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RESULT 15

PCT-US93-07422-4

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; Sequence 4, Application PC/TUS9307422
; GENERAL INFORMATION:
; APPLICANT: Progenics Pharmaceuticals, Inc.
; TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
; TITLE OF INVENTION: CD4-GAMMA2 AND CD4-1G2 IMMUNOCONJUGATES, AND USES THEREOF
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooper & Dunham
; STREET: 30 Rockefeller Plaza
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10112
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.24
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/07422
; FILING DATE: 19930806
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/927,931
; FILING DATE: 07-AUG-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPW/AJM
; TELEPHONE: (212) 977-9550
; TELEFAX: (212) 977-9809
; TELEX: 422523 COOP UI
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 530 amino acids

```

```

; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: cDNA
; ORIGINAL SOURCE:
; ORGANISM: homo sapien
; CELL TYPE: lymphocyte
; PCT-US93-07422-4

```

```

Query Match 77.2%; Score 2085; DB 5; Length 530;
Best Local Similarity 77.3%; Pred. No. 7.4e-154;
Matches 409; Conservative 9; Mismatches 13; Indels 98; Gaps 4;

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QY      1  MRGVPFRHLLVLQALLPAAATGKQKVVLGKKGDVVELCTASQKKSIOFMKNSNOIK 60
Db      1  MRGVPFRHLLVLQALLPAAATGKQKVVLGKKGDVVELCTASQKKSIOFMKNSNOIK 60
QY      61  ILGNQGSFLTKGSPSKLNDRADSRSLMDQGNFPLIIKLIKIEDSDTYICEVEDQKEEVOL 120
Db      61  ILGNQGSFLTKGSPSKLNDRADSRSLMDQGNFPLIIKLIKIEDSDTYICEVEDQKEEVOL 120
QY      121  LVFGLTANSDFHLLQGSLLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
Db      121  LVFGLTANSDFHLLQGSLLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY      181  TWTCTVLQNKQKVEKIDIV-----PCPA-----PEP 207
Db      181  TWTCTVLQNKQKVEKIDIVLAFASTKGPSVFLAPCSRSTSESTALGCLVKDYFPEP 240
QY      208  ----- 207
Db      241  VIVSNMNGALTSQVHTFPAVLQSSGLSYLSVTVTPSSNFGTQTYTCNVDHKPSNTKVDK 300
QY      208  ---KSCDKHTICP-ELIGSPSVFLFPKPKDITMISRTPEVTCVVDVSHEDPEVKFNW 262
Db      301  TVERKCCVCEPCPAPVAGPSVFLFPKPKDITMISRTPEVTCVVDVSHEDPEVKFNW 360
QY      263  YVDGVEVHNAKTPREEOYNSTFRVSVLTVLHQMNLNGEKYCKVSNKALPAPIEKTIS 322
Db      361  YVDGVEVHNAKTPREEOYNSTFRVSVLTVLHQMNLNGEKYCKVSNKALPAPIEKTIS 420
QY      323  KAKGPREPOVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMWSNGQPENNYKTTTPV 382
Db      421  KTKGPREPOVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMWSNGQPENNYKTTTPV 480
QY      383  LDSGSEFLYSKLTVDKSRMOQGNVSCSVMEALHNNHTOKSLSLSPG 431
Db      481  LDSGSEFLYSKLTVDKSRMOQGNVSCSVMEALHNNHTOKSLSLSPG 529

```

RESULT 16

US-08-630-172-17

```

; Sequence 17, Application US/08630172
; Patent No. 6060054
; GENERAL INFORMATION:
; APPLICANT: Staerz, Uwe
; TITLE OF INVENTION: NOVEL PRODUCT AND PROCESS FOR T
; TITLE OF INVENTION: LYMPHOCYTE VETO
; NUMBER OF SEQUENCES: 41
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sheridan Rose & McIntosh
; STREET: 1700 Lincoln Street, 35th Floor
; CITY: Denver
; STATE: Colorado
; COUNTRY: U.S.
; ZIP: 80203
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/630,172

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; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Connell, Gary J.
; REGISTRATION NUMBER: 32,020
; REFERENCE/DOCKET NUMBER: 2879-36
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (303) 863-9700
; TELEFAX: (303) 863-0223
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 410 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-630-172-17

Query Match      61.0%; Score 1647.5; DB 3; Length 410;
Best Local Similarity 75.8%; Pred. No. 5,1e-120;
Matches 316; Conservative 31; Mismatches 51; Indels 19; Gaps 4;

QY 26 NKVVLGKGGDTVELTCTASQKSIQFMKNSNOIKILGNQGSFLTKGPSKLNDRADSRRS 85
DB 1 NKVVLGKGGDTVELTCTASQKSIQFMKNSNOIKILGNQGSFLTKGPSKLNDRADSRRS 60
QY 86 LMDQGNFPLIIKLIKIEDSDTYICEVEDQKEEVQVLVFGLTANSPTLLQGS/LTTLFS 145
DB 61 LMDQGNFPLIIKLIKIEDSDTYICEVEDQKEEVQVLVFGLTANSPTLLQGS/LTTLFS 120
QY 146 PPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWCTVLOKQKVEKIDIV----- 200
DB 121 PPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWCTVLOKQKVEKIDIVLAEP 180
QY 201 -----PCPAPBPSCDKHTHCPPELLGSPVFLPPPKPDTLMISRPEVTCVVDVSH 254
DB 181 RGPTRKPC---PCKC---PAPNLGGPSVFLPPPKIKOVLMSISPIVTCVVDVSED 233
QY 255 DPEVKFNMYDGVGVNNAKTPREQYNSYTRVSVLTVLHODMLNGEKYCKVSKALP 314
DB 234 DPEVQISMVFNVNEVHTAQOTHRREDYNSRLRVVSALPIQHODMSGKEKCKVNNKDL 293
QY 315 APIEKTISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGYPSPDIAVEMESNQOPEN 374
DB 294 APIERTISKPKGSVRAPQVYVLP--EEMTKQVTLTCVTDMPEDIVYEMTNNGKTEL 352
QY 375 NYKTPPVLDSDGSFFLYSKLTVDKSRMOQGNVFGSCVWHEALHNHTQKSLSPG 431
DB 353 NYKTEPVLDSDGSFFMYSKLTVREKKNMVERNSYSCVWHEGLHNHTTKFSRTPG 409

RESULT 17
US-09-375-419-17
; Sequence 17, Application US/09375419
; Patent No. 6264950
; GENERAL INFORMATION:
; APPLICANT: Staerz, Uwe
; TITLE OF INVENTION: NOVEL PRODUCT AND PROCESS FOR T
; NUMBER OF SEQUENCES: 41
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sheridan Ross & McInosh
; STREET: 1700 Lincoln Street, 35th Floor
; CITY: Denver
; STATE: Colorado
; COUNTRY: U.S.
; ZIP: 80203
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/375,419
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; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/630,172
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Connell, Gary J.
; REGISTRATION NUMBER: 32,020
; REFERENCE/DOCKET NUMBER: 2879-36
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (303) 863-9700
; TELEFAX: (303) 863-0223
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 410 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-375-419-17

Query Match      61.0%; Score 1647.5; DB 3; Length 410;
Best Local Similarity 75.8%; Pred. No. 5,1e-120;
Matches 316; Conservative 31; Mismatches 51; Indels 19; Gaps 4;

QY 26 NKVVLGKGGDTVELTCTASQKSIQFMKNSNOIKILGNQGSFLTKGPSKLNDRADSRRS 85
DB 1 NKVVLGKGGDTVELTCTASQKSIQFMKNSNOIKILGNQGSFLTKGPSKLNDRADSRRS 60
QY 86 LMDQGNFPLIIKLIKIEDSDTYICEVEDQKEEVQVLVFGLTANSPTLLQGS/LTTLFS 145
DB 61 LMDQGNFPLIIKLIKIEDSDTYICEVEDQKEEVQVLVFGLTANSPTLLQGS/LTTLFS 120
QY 146 PPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWCTVLOKQKVEKIDIV----- 200
DB 121 PPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWCTVLOKQKVEKIDIVLAEP 180
QY 201 -----PCPAPBPSCDKHTHCPPELLGSPVFLPPPKPDTLMISRPEVTCVVDVSH 254
DB 181 RGPTRKPC---PCKC---PAPNLGGPSVFLPPPKIKOVLMSISPIVTCVVDVSED 233
QY 255 DPEVKFNMYDGVGVNNAKTPREQYNSYTRVSVLTVLHODMLNGEKYCKVSKALP 314
DB 234 DPEVQISMVFNVNEVHTAQOTHRREDYNSRLRVVSALPIQHODMSGKEKCKVNNKDL 293
QY 315 APIEKTISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGYPSPDIAVEMESNQOPEN 374
DB 294 APIERTISKPKGSVRAPQVYVLP--EEMTKQVTLTCVTDMPEDIVYEMTNNGKTEL 352
QY 375 NYKTPPVLDSDGSFFLYSKLTVDKSRMOQGNVFGSCVWHEALHNHTQKSLSPG 431
DB 353 NYKTEPVLDSDGSFFMYSKLTVREKKNMVERNSYSCVWHEGLHNHTTKFSRTPG 409

RESULT 18
US-08-284-391B-33
; Sequence 33, Application US/08284391B
; Patent No. 5851828
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; APPLICANT: Banapour, Babak
; APPLICANT: Romeo, Charles
; APPLICANT: Kojanne, Waldemar
; TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
```

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/284,391B
FILING DATE: 02-AUG-1994
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/195,395
FILING DATE: 14-FEB-1994
APPLICATION NUMBER: 07/847,566
FILING DATE: 06-MAR-1992
APPLICATION NUMBER: 07/665,961
FILING DATE: 07-MAR-1991
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L.
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/247001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045
TELEX:
INFORMATION FOR SEQ ID NO: 33:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-284-391B-33

Query Match 49.5%; Score 1338.5; DB 2; Length 254;
Best Local Similarity 98.0%; Pred. No. 2.7e-96;
Matches 249; Conservative 0; Mismatches 0; Indels 5; Gaps 1;

QY 206 EPKSCDKHTHC-----PELLGSPSVFLPPPKKDTLMISRPPEVTCVVVDVSHEDPEVKF 260
DB 1 EPKSCDKHTCPCCPAPBELGSPSVFLPPPKKDTLMISRPPEVTCVVVDVSHEDPEVKF 60
QY 261 NMVYDGEVHNNAKTREREOYNSTYRVSVLTVLHQMVLNGKEYCKVSNKALPAPIEKT 320
DB 61 NMVYDGEVHNNAKTREREOYNSTYRVSVLTVLHQMVLNGKEYCKVSNKALPAPIEKT 120
QY 321 ISKAGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFTPSDIAVWESNGOPENNYKTT 380
DB 121 ISKAGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFTPSDIAVWESNGOPENNYKTT 180
QY 381 PVLDSGSEFLYSKLTVDKSRMOQGNVFCSCVMEALHNNHYTKSLSPGLQDETCAE 440
DB 181 PVLDSGSEFLYSKLTVDKSRMOQGNVFCSCVMEALHNNHYTKSLSPGLQDETCAE 240
QY 441 AODGELDGLMTTDP 454
DB 241 AODGELDGLMTTDP 254

RESULT 19
US-09-218-950-33
Sequence 33, Application US/09218950
Patent No. 6284240
GENERAL INFORMATION:
APPLICANT: Seed, Brian
APPLICANT: Banapour, Babak
APPLICANT: Romeo, Charles
APPLICANT: Kolanue, Waldemar
TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
NUMBER OF SEQUENCES: 53
CORRESPONDENCE ADDRESS:
ADDRESS: Clark & Elbing LLP
STREET: 176 Federal Street
CITY: Boston

STATE: MA
COUNTRY: USA
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/218,950
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/284,391
FILING DATE: 02-AUG-1994
APPLICATION NUMBER: 08/195,395
FILING DATE: 14-FEB-1994
APPLICATION NUMBER: 07/847,566
FILING DATE: 06-MAR-1992
APPLICATION NUMBER: 07/665,961
FILING DATE: 07-MAR-1991
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L.
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/247001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045
TELEX:
INFORMATION FOR SEQ ID NO: 33:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-218-950-33

Query Match 49.5%; Score 1338.5; DB 3; Length 254;
Best Local Similarity 98.0%; Pred. No. 2.7e-96;
Matches 249; Conservative 0; Mismatches 0; Indels 5; Gaps 1;

QY 206 EPKSCDKHTHC-----PELLGSPSVFLPPPKKDTLMISRPPEVTCVVVDVSHEDPEVKF 260
DB 1 EPKSCDKHTCPCCPAPBELGSPSVFLPPPKKDTLMISRPPEVTCVVVDVSHEDPEVKF 60
QY 261 NMVYDGEVHNNAKTREREOYNSTYRVSVLTVLHQMVLNGKEYCKVSNKALPAPIEKT 320
DB 61 NMVYDGEVHNNAKTREREOYNSTYRVSVLTVLHQMVLNGKEYCKVSNKALPAPIEKT 120
QY 321 ISKAGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFTPSDIAVWESNGOPENNYKTT 380
DB 121 ISKAGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFTPSDIAVWESNGOPENNYKTT 180
QY 381 PVLDSGSEFLYSKLTVDKSRMOQGNVFCSCVMEALHNNHYTKSLSPGLQDETCAE 440
DB 181 PVLDSGSEFLYSKLTVDKSRMOQGNVFCSCVMEALHNNHYTKSLSPGLQDETCAE 240
QY 441 AODGELDGLMTTDP 454
DB 241 AODGELDGLMTTDP 254

RESULT 20
US-08-157-101A-7
Sequence 7, Application US/08157101A
Patent No. 5808032
GENERAL INFORMATION:
APPLICANT: KURIHARA, TATSUYA
APPLICANT: MATSUKURA, SHIGEKAZU
APPLICANT: TSURUOKA, NOBUO
APPLICANT: ARIMA, KENJI
APPLICANT: NISHIHARA, TATSURO

```

TITLE OF INVENTION: ANTI-HBs ANTIBODY GENES AND EXPRESSION
TITLE OF INVENTION: PLASMIDS THEREFOR
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: PILLSBURY, MADISON & SUTRO
STREET: 1100 NEW YORK AVENUE, N.W.
CITY: WASHINGTON
STATE: D.C.
COUNTRY: USA
ZIP: 20005

COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/157,101A
FILING DATE: 05-APR-1994
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: TITUS, MARLANA K
REGISTRATION NUMBER: 35843
REFERENCE/DOCKET NUMBER: 9437/204199
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-861-3711
TELEFAX: 202-822-0944
TELEX: 6714627 CUCH
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 459 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-157-101A-7

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Query Match      47.5%; Score 1284.5; DB 1; Length 459;
Best Local Similarity 59.4%; Pred. No. 9.7e-92;
Matches 280; Conservative 30; Mismatches 68; Indels 93; Gaps 17;

QY 25 GNRVGLGKGDVLELTCTAS--OKSKIQFMW-----KNSNOIKIL--GNQGSFL--TK 71
DB 17 GGGV--QPRSRILRLSCAASGFTSSNSMHWRAQPKGLEWAVILYDGNHKKFYADSVK 74
QY 72 GPKLNDNRADSRSLMOQNFPLIIKLIKIEDSDTYICEVEDQKEVQLLVFGILTANSOT 131
DB 75 GRFTIS-RDMSKNTLY-----LEVKSLOTEDTGVVYC-IRDQ-----TYGV----- 113
QY 132 HLQ--GQSLTLTLESPGSSPSVQCRSPRKNIOG-----KTLSVS----- 172
DB 114 HRDMSQGTLLVYSSASTGSPVFLAPSSKSTSGTALGCLVQDYFPEPVTVSNNG 173
QY 173 -----OLELDGSG-----TWCTVLONOKKVEFKIDIVPCAP 205
DB 174 ALASGVTPFAVLQSSGLYSLSSVTVVPSSSLGTQTYICNV--NHKSNTKVD---KKV 227
QY 206 EPRSCDTHTC-----PELLGSPSVFLPPPKPDTLMISTRPEVTCVVVDVSHEDPEVK 260
DB 228 EPRSCDTHTCPCPAPPELLGSPSVFLPPPKPDTLMISTRPEVTCVVVDVSHEDPEVK 287
QY 261 NMVVDGVEVHNAKTKPREEOYNSTRYVSVLTVLHODMLNGEKYCKVSNKALPAPIEKT 320
DB 288 NMVVDGVEVHNAKTKPREEOYNSTRYVSVLTVLHODMLNGEKYCKVSNKALPAPIEKT 347
QY 321 ISKAGQPREPOVYTLPPSRDELTKQVSLTCLVKGFPYSDIAVEMESNGQPENNYKTP 380
DB 348 ISKAGQPREPOVYTLPPSRDELTKQVSLTCLVKGFPYSDIAVEMESNGQPENNYKTP 407
QY 381 PVLDSDGSFLLYSLKLTVDKSRMOQGNVSCSVHGEALHNYTQKSLSLSG 431
DB 408 PVLDSDGSFLLYSLKLTVDKSRMOQGNVSCSVHGEALHNYTQKSLSLSG 458

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RESULT 21
US-08-397-411-7
Sequence 7; Application US/08397411
Patent No. 612914
GENERAL INFORMATION:
APPLICANT: Weiner, George
APPLICANT: Gingrich, Roger
APPLICANT: Link, Brian
APPLICANT: Tso, J Yun
TITLE OF INVENTION: Bispecific Antibody Effective to Treat
TITLE OF INVENTION: B-Cell Lymphoma and Cell Line
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew
STREET: One Market Plaza, Steuart Tower, Suite 2000
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94105

COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/397,411
FILING DATE: 01-MAR-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/859,583
FILING DATE: 27-MAR-1992
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M.
REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 011823-004901
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-326-2400
TELEFAX: 415-326-2422
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 446 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-397-411-7

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Query Match      47.5%; Score 1282.5; DB 3; Length 446;
Best Local Similarity 59.8%; Pred. No. 1.3e-91;
Matches 274; Conservative 25; Mismatches 80; Indels 79; Gaps 10;

QY 30 LGRKGDVLELTCTASOKSKIQF--HWKNSNOIKILGNQGSFLTKGPKLNDNRADSRSL 86
DB 11 LVKPSFTLSLTCTVSGFSLTNVGVHWRQSPKGLEWIGVKNMGSGSTEVNAATISLTLIS 70
QY 87 --WDQNFPLIIKLIKIEDSDTYICEVEDQKEVQLLVGILTANSSTHLLQ--GQSLTLT 142
DB 71 KQTSKQVSLKNSLTPADTAAYVC-----ARNDRYAMDYWGQGTLLVT 113
QY 143 LSPGSSPSVQCRSPRKNIOG-----KTLSVS-----OLEL 176
DB 114 VSSASTGSPSVFLAPSSKSTSGTALGCLVQDYFPEPVTVSNNGALTSQVTPFAVL 173
QY 177 ODGSG-----TWCTVLONOKKVEFKIDIVPCAPPEPKSCDTHTC-- 216
DB 174 QSSGLYSLSSVTVVPSSSLGTQTYICNV--NHKPSNTKVD---KVEPKSCDTHTCPC 227
QY 217 ---PELLGSPSVFLPPPKPDTLMISTRPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNAK 273
DB 228 CPAPELLGSPSVFLPPPKPDTLMISTRPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNAK 287
QY 274 TKPREOYNSTRYVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISKAGQPREPOV 333

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Db      288 TKREBQVNSTYRVSVLTVLHQMNLNGKCKKCNKALPAIEKTIKAKGQPREPV 347
Qy      334 YTLPEBDELTKQVSLTCLVKGFFYPSDIAVWESGQENNYKTTPLVLDGSGFFLYS 393
Db      348 YTLPEBDELTKQVSLTCLVKGFFYPSDIAVWESGQENNYKTTPLVLDGSGFFLYS 407
Qy      394 KLTVDKSRWQOQNVFSCSVMEALHNHYOKSLSLSPG 431
Db      408 KLTVDKSRWQOQNVFSCSVMEALHNHYOKSLSLSPG 445

RESULT 22
US-09-740-002-25
; Sequence 25, Application US/09740002
; Patent No. 6537809
; GENERAL INFORMATION:
; APPLICANT: BRAMS, PETER
; APPLICANT: MORROW, PHILLIP
; TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES
; TITLE OF INVENTION: SPECIFIC TO RSV F-PROTEIN AND METHODS FOR THEIR
; TITLE OF INVENTION: MANUFACTURE AND THERAPEUTIC USE THEREOF
; FILE REFERENCE: 037003-0275759
; CURRENT APPLICATION NUMBER: US/09/740,002
; PRIOR FILING DATE: 2000-12-20
; PRIOR APPLICATION NUMBER: 09/335,697
; PRIOR FILING DATE: 1999-06-18
; PRIOR APPLICATION NUMBER: 08/488,376
; PRIOR FILING DATE: 1995-06-07
; SOFTWARE: Patent In Ver. 2.1
; NUMBER OF SEQ ID NOS: 27
; SEQ ID NO 25
; LENGTH: 475
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-740-002-25

Query Match      47.2%; Score 1276.5; DB 4; Length 475;
Best Local Similarity 57.1%; Pred. No. 4.3e-91;
Matches 281; Conservative 27; Mismatches 87; Indels 97; Gaps 12;

Qy      10 LLLVLQALLPAATGKGNKVLGKGGDTVELTCTAS-----QKKSIOFHWK 54
Db      10 LVAVATRVLSQVLOSGPVPVVFETFLTLCTVSFSLNPRMGVTWRQPPGKALEN- 68
Qy      55 NSNQIKILGN-----QGSFLTKGSPSLNDRADSRSLMOQGNPLIILKULKIEDSTYIC 109
Db      69 -----LGNIFSSDKSPSPSLKSRLLTSQDTSRS-----QVVLSTLVNDPVDATYYC 116
Qy      110 EVEDQKEVQLVFGLTANS DTHL-LQGOSLTLVLESPPGSSPSVQCRSPRGKNIQGG-- 166
Db      117 -----ARVGLYDINAYLYLYLDYWGQCTLVTVSSASTKGPSPVPLAPSSKSTSGGTA 168
Qy      167 -----KTLVS-----QLELDQSG-----TWTC 184
Db      169 ALGCLVQDYFPEPEVTATSNMNGALTSGVHPRPAVLQSGSLYSLSSVTVTPSSLSGTYYIC 228
Qy      185 TYLQNKQKVEFKIDIPCAPAPKSCDKTHTC-----PELLGSPSFLFPPPKDTLMS 239
Db      229 NV--NKKPSNTKVD-----KKAEPKSCDKTHTCPPCAPAPLGGPSVFLFPPPKDTLMS 282
Qy      240 RPEPVTCVVVDVSHEDPEVKFNMYVDGVEVHNKATKPREQVSTYRVSVLTVLHQDWL 299
Db      283 RPEPVTCVVVDVSHEDPEVKFNMYVDGVEVHNKATKPREQVSTYRVSVLTVLHQDWL 342
Qy      300 NGKEYCKVSNKALPAPIEKTISKAKGQPREPVYTLPPSRDELTKNQVSLTCLVKGFPY 359
Db      343 NGKEYCKVSNKALPAPIEKTISKAKGQPREPVYTLPPSRDELTKNQVSLTCLVKGFPY 402
Qy      360 SDIAVWESNGQENNYKTTPLVLDGSGFFLYSKLTVDSKRWQOQNVFSCSVMEALHN 419
Db      403 SDIAVWESNGQENNYKTTPLVLDGSGFFLYSKLTVDSKRWQOQNVFSCSVMEALHN 462
Qy      420 HTYQKSLSLSPG 431

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Db      463 HTYQKSLSLSPG 474

RESULT 23
US-07-934-373C-22
; Sequence 22, Application US/07934373C
; Patent No. 5821337
; GENERAL INFORMATION:
; APPLICANT: Paul J. Carter
; APPLICANT: Leonard G. Presta
; TITLE OF INVENTION: Immunoglobulin Variants
; NUMBER OF SEQUENCES: 48
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Winpatin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/934,373C
; FILING DATE: 21-Aug-1992
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US92/05126
; FILING DATE: 15-JUN-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/715272
; FILING DATE: 14-JUN-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Lee, Wendy M.
; REGISTRATION NUMBER: 40,378
; REFERENCE/DOCKET NUMBER: P0709P2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-1994
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 454 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
US-07-934-373C-22

Query Match      47.2%; Score 1274.5; DB 2; Length 454;
Best Local Similarity 59.9%; Pred. No. 5.7e-91;
Matches 275; Conservative 24; Mismatches 87; Indels 73; Gaps 11;

Qy      30 LGKKGDVTELTCTASQKKSIOF--HMKNSNQIKILGNQSGFYLK-GPSKLNDRADSRSL 86
Db      11 LVKPGASVKISCKISKISGYFTETVMNMKSHGKSLKLEWIGFAPKNGGSHNRFPDKATL 70
Qy      87 ---WDQGNPLIILKULKIEDSDTYICEVEDQKEVQLVFGLTANS DTHLQ--GQSLTL 141
Db      71 AVDKSTAYMELRSLTSEDSGIYYC-----ARWRGLNYGFDRVFPDVGACGTTV 120
Qy      142 TLESPPGSSPSVQCSPPRGKNIQGG-----KTLVS-----QLE 175
Db      121 TVSSASTGSPSVPLAPSSKSTSGGTAALGCLVQDYFPEPVATSNMNGALTSGVHTPAV 180
Qy      176 LDQSG-----TWTCVTLQNKQKVEFKIDIPCAPAPKSCDKTHTC- 216
Db      181 LQSGSLYSLSSVTVTPSSLSGTYYICNV--NKKPSNTKVD-----KKAEPKSCDKTHTC 234
Qy      217 ---PELLGSPSFLFPPPKDTLMSI RPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNA 272
Db      235 PCPABELLGGPSVFLFPPPKDTLMSI RPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNA 294

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0Y      273  KTKPEEEQNSYRYVSVYLTVHQOMLNGKEYKCYSNMPLAPLEKTISSKAGQPREQ  332
Db      225  KTKPEEEQNSYRYVSVYLTVHQOMLNGKEYKCYSNMPLAPLEKTISSKAGQPREQ  354
0Y      333  VYTLPPSEDELTKNOVSLTCLVKGFFYPSDIAVEMESNQPENNYKTTTPVLDSDGSFFLY  392
Db      355  VYTLPPSEEMTKNOVSLTCLVKGFFYPSDIAVEMESNQPENNYKTTTPVLDSDGSFFLY  414
0Y      393  SKLTVDKSRWQGNVFCSCVWHEALHNHYTKSLSLSPG  431
Db      415  SKLTVDKSRWQGNVFCSCVWHEALHNHYTKSLSLSPG  453

RESULT 24
US-08-437-642B-22
; Sequence 22, Application US/08437642B
; Patent No. 6054297
; GENERAL INFORMATION:
; APPLICANT: Paul J. Carter
; APPLICANT: Leonard G. Preete
; TITLE OF INVENTION: Immunoglobulin Variants
; NUMBER OF SEQUENCES: 47
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/437,642B
; FILING DATE: 09-May-1995
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/934373
; FILING DATE: 21-AUG-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/146206
; FILING DATE: 17-NOV-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US92/05126
; FILING DATE: 15-JUN-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/715272
; FILING DATE: 14-JUN-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Lee, Wendy M.
; REGISTRATION NUMBER: 40,378
; REFERENCE/DOCKET NUMBER: P0709P2C1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-1994
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 454 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
US-08-437-642B-22

Query Match 47.2%; Score 1274.5; DB 3; Length 454;
Best Local Similarity 59.9%; Pred. No. 5,7e-91;
Matches 275; Conservative 24; Mismatches 87; Indels 73; Gaps 11.

0Y      30  LKKKDDYELTCTAQQKSIOF--HWKNSNOIKILNGSGFLLTK-GPSKLDNRADRSRL  86
Db      11  LVKPPASVKISCKTSIGYTFETVTHMMQSHKSLFWIGCFPKPKGGSSHNRFPMDKATL  70

0Y      87  ---WDQGNPLIIRKLIKLEDSDTYICEVEDQKEVOLLVFGLTANSSTHLLQ--GQSILTL  141

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Db      71 AVDSTSTANWELASLTSBDSGIYYC-----ARMRLANGFVDRYFDWAGACTTV 120
Oy      142 TLSPGSSPVQCRSPRGKNIQGG-----KTLVS-----OLE 175
Db      121 TVSASATGSPVPLAPSSKSTSGTALGCLVKDYPPEPVTVSWSNGALTSVHTPPAV 180
Oy      176 LODSG-----TWCTVYNOKKVEKIDIVCPAPAEPSCDKTHTC- 216
Db      181 LQSSGLYSLSSTVTVSSSLGCTGYICNV--NHRKPSNTKV-----KVEKPSKCDKTHTCP 234
Oy      217 ----PELLGSGSVFLFPKPXDITMISRTPEVTCVWVDVSHEDPEVKFNWYVDGEVNA 272
Db      235 PCPAPELLGSGSVFLFPKPXDITMISRTPEVTCVWVDVSHEDPEVKFNWYVDGEVNA 294
Oy      273 KTKPREBOYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISKAKQPREPO 332
Db      295 KTKPREBOYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISKAKQPREPO 354
Oy      333 VYTPPEPSDELTKQVSLTCLVKGFPYSDIAVENESQCPENNYKTPPVLDSDGSFFLY 392
Db      355 VYTPPEPSDEETKQVSLTCLVKGFPYSDIAVENESQCPENNYKTPPVLDSDGSFFLY 414
Oy      393 SKLTVDSKRWQGNVFCSCVWHEALHNHYTKKSLSPG 431
Db      415 SKLTVDSKRWQGNVFCSCVWHEALHNHYTKKSLSPG 453

RESULT 25
US-08-146-206C-22
; Sequence 22, Application US/08146206C
; Patent No. 6407213
; GENERAL INFORMATION:
; APPLICANT: Carter, Paul J.
; APPLICANT: Presta, Leonard G.
; TITLE OF INVENTION: Method for Making Humanized Antibodies
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Winpatin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/146,206C
; FILING DATE: 17-No. 6407213-1993
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/715272
; FILING DATE: 14-JUN-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Lee, Wendy M.
; REGISTRATION NUMBER: 40,378
; REFERENCE/DOCKET NUMBER: P0709P1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-1994
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 454 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
US-08-146-206C-22
Query Match 47.2%; Score 1274.5; DB 4; Length 454;
Best Local Similarity 59.9%; Pred. No. 5,7e-91;
Matches 275; Conservative 24; Mismatches 87; Indels 73; Gaps 11;

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QY 30 LKKGDTVELTCTASOKKSIOF--HWKNSNOIKILGNOSPLTK--GPSKLNDRADSRRL 86
DB 11 LKPGASVAKISCKTSYTFTEYTHMMKSHGKSLEWIGFPPKNGSGSHNORFMDKATL 70
QY 87 ---WDQGNPLIILKLIKIEDSDTYICEVEDQKEVQLVFGLTANSDFHLO--GQSLLT 141
DB 71 AVDKSTSTAYMELRLSTSEDSGIYTC-----ARWRGLNYGFDVRYFDVWGAGTIV 120
QY 142 TLESPPGSSPSVQCSPPRGKNIQGG-----KTLSSV-----OLE 175
DB 121 TVSSASTKGPSVFPLAPSSKSTSGGTALGCLVKDYFPEPVYVSNNGALTSGVHFPFV 180
QY 176 LQDSG-----TWCTVLONOKKVEFKIDIVPCPAPEPKSCDKTHTC- 216
DB 181 LQSSGLYLSLSVYTVVSSSLGTQTYICNV--NHKPSNTKVD---KVEPKSCDKTHTC 234
QY 217 ---PELLGGPSVFLFPPPKDPTLMISTRPEVTCVVVDVSHEDPEVKFMVYDGEVHNA 272
DB 235 PCPAPELLGGPSVFLFPPPKDPTLMISTRPEVTCVVVDVSHEDPEVKFMVYDGEVHNA 294
QY 273 KTKPREEOYNSTYRVSVLTVLHODMLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQ 332
DB 295 KTKPREEOYNSTYRVSVLTVLHODMLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQ 354
QY 333 VYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLY 392
DB 355 VYTLPPSRDEMTKNOVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLY 414
QY 393 SKLTVDKSRMOQGNVFCSCVMHEALHNHYTOKSLSPG 431
DB 415 SKLTVDKSRMOQGNVFCSCVMHEALHNHYTOKSLSPG 453

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RESULT 26
US-09-705-686-22
; Sequence 22, Application US/09705686
; Patent No. 6639055
; GENERAL INFORMATION:
; APPLICANT: Carter, Paul J.
; Presta, Leonard G.
; TITLE OF INVENTION: Method for Making Humanized Antibodies
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/705 686
; FILING DATE: 02-NO. 6639055-2000
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/146206
; FILING DATE: 17-NOV-1993
; APPLICATION NUMBER: 07/715272
; FILING DATE: 14-JUN-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Lee, Wendy M.
; REGISTRATION NUMBER: 40,378
; REFERENCE/DOCKET NUMBER: P0709P1D3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-1994
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:

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; LENGTH: 454 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 22:
US-09-705-686-22

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```

Query Match 47.2%; Score 1274.5; DB 4; Length 454;
Best Local Similarity 59.9%; Pred. No. 5.7e-91;
Matches 275; Conservative 24; Mismatches 87; Indels 73; Gaps 11;

```

```

QY 30 LKKGDTVELTCTASOKKSIOF--HWKNSNOIKILGNOSPLTK--GPSKLNDRADSRRL 86
DB 11 LKPGASVAKISCKTSYTFTEYTHMMKSHGKSLEWIGFPPKNGSGSHNORFMDKATL 70
QY 87 ---WDQGNPLIILKLIKIEDSDTYICEVEDQKEVQLVFGLTANSDFHLO--GQSLLT 141
DB 71 AVDKSTSTAYMELRLSTSEDSGIYTC-----ARWRGLNYGFDVRYFDVWGAGTIV 120
QY 142 TLESPPGSSPSVQCSPPRGKNIQGG-----KTLSSV-----OLE 175
DB 121 TVSSASTKGPSVFPLAPSSKSTSGGTALGCLVKDYFPEPVYVSNNGALTSGVHFPFV 180
QY 176 LQDSG-----TWCTVLONOKKVEFKIDIVPCPAPEPKSCDKTHTC- 216
DB 181 LQSSGLYLSLSVYTVVSSSLGTQTYICNV--NHKPSNTKVD---KVEPKSCDKTHTC 234
QY 217 ---PELLGGPSVFLFPPPKDPTLMISTRPEVTCVVVDVSHEDPEVKFMVYDGEVHNA 272
DB 235 PCPAPELLGGPSVFLFPPPKDPTLMISTRPEVTCVVVDVSHEDPEVKFMVYDGEVHNA 294
QY 273 KTKPREEOYNSTYRVSVLTVLHODMLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQ 332
DB 295 KTKPREEOYNSTYRVSVLTVLHODMLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQ 354
QY 333 VYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLY 392
DB 355 VYTLPPSRDEMTKNOVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLY 414
QY 393 SKLTVDKSRMOQGNVFCSCVMHEALHNHYTOKSLSPG 431
DB 415 SKLTVDKSRMOQGNVFCSCVMHEALHNHYTOKSLSPG 453

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RESULT 27
PCT-US93-07832-22
; Sequence 22, Application PC/TUS9307832
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; TITLE OF INVENTION: Immunoglobulin Variants
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 460 Point San Bruno Blvd
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/07832
; FILING DATE: 19930820
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/715272
; FILING DATE: 14-JUN-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US92/05126
; FILING DATE: 15-JUN-1992
; PRIOR APPLICATION DATA:

```

```

APPLICATION NUMBER: 07/934373
FILING DATE: 21-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME:
REGISTRATION NUMBER:
REFERENCE/DOCKET NUMBER: 709P2PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE:
TELEFAX: 415/952-9981
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 454 amino acids
TYPE: amino acid
TOPOLOGY: linear
PCT-US93-07832-22

Query Match      47.2%; Score 1274.5; DB 5; Length 454;
Best Local Similarity 59.9%; Pred. No. 5.7e-91;
Matches 275; Conservative 24; Mismatches 87; Indels 73; Gaps 11;

QY 30 LGKGDVVELTCTASQKSIQF--HMKNNOIKLNGQSFYTK-GPSKLNDRADSRSL 86
DB 11 LVKPGASVKISCKTSGYTFEYTHMMKSHGSKLEWIGGFNPKGSSSHORFMDKATL 70
QY 87 ---WDGNPPLIINKLKIEDSDTYICEVEDQKEEVQLVFGLTANSPTHLQ--GQSLTL 141
DB 71 AVDKSTAYMELSLTSEDSGIYYC-----ARMRLNGVGFVRYFDVWGAQTTV 120
QY 142 TLSPSPGSSPVQCRSPRGKNIQCG-----KTLVSYS-----QLE 175
DB 121 TVSSASTKGPSVFPPLAPSSKSTSGTALGCLVDYFPEPYTSMNSGALTSQVHTPEAV 160
QY 176 LQDSG-----TWCTVYLNQKKEFKIDYPCAPPEKSCDKTHTC- 216
DB 181 LQSSGLYSLSSVTVPPSSSLGTQYICNV--NHKPSNTKYD---KLYEPKSCDKTHTC 234
QY 217 -----PELLGSPSVFLPPPKKPDITMISRTPEVTCVVVDVSHEDPEVKFNNYVGVGHNA 272
DB 235 PCPAPPELLGSPSVFLPPPKKPDITMISRTPEVTCVVVDVSHEDPEVKFNNYVGVGHNA 294
QY 273 KTRPREQVNSTYRVSVLTVLHQMVLNGKEYCKVSNKALPAPIETKISKAKQPREPQ 332
DB 295 KTRPREQVNSTYRVSVLTVLHQMVLNGKEYCKVSNKALPAPIETKISKAKQPREPQ 354
QY 333 VYTLPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLY 392
DB 355 VYTLPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLY 414
QY 393 SKLTVDKSRWQGVNFCGVHMEALHNHYTQKSLSLSPG 431
DB 415 SKLTVDKSRWQGVNFCGVHMEALHNHYTQKSLSLSPG 453

RESULT 28
US-09-049-672A-4
Sequence 4, Application US/09049672A
Patent No. 6135941
GENERAL INFORMATION:
APPLICANT: Hillman, Jennifer L.
APPLICANT: Lal, Preeti
APPLICANT: Tang, Y. Tom
APPLICANT: Yue, Henry
APPLICANT: Au-Young, Janice
APPLICANT: Corley, Neil C.
APPLICANT: Guegler, Karl J.
APPLICANT: Baughn, Mariah R.
TITLE OF INVENTION: HUMAN IMMUNE SYSTEM ASSOCIATED PROTEINS
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
CITY: Palo Alto

```

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STATE: CA
COUNTRY: USA
ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/049,672A
FILING DATE: HEREWITTH
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Certone, Michael C
REGISTRATION NUMBER: 39,132
REFERENCE/DOCKET NUMBER: PF-0497 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
TELEFAX: 650-845-4166
TELEX:
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 473 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBRARY: PANTCTU01
CLONE: 1513264
US-09-049-672A-4

Query Match      47.2%; Score 1274.5; DB 3; Length 473;
Best Local Similarity 57.2%; Pred. No. 6e-91;
Matches 278; Conservative 29; Mismatches 102; Indels 77; Gaps 11;

QY 8 RHLLVQLALP-----AATGKNKVLAKKGDVVELTCTAS--QKSIQFHKNKSNQI 59
DB 2 KHLMPFELLVAABRWVLQVQLQESGPGLVKPSSETLSLTCVAGSGSITSGGYWSWIRP 61
QY 60 KILGNO--GSFLKNGSKLNDRADSRSL---WDGNPPLIINKLKIEDSDTYICEVEDQ 114
DB 62 PGKGLWIGTYISGSTLINPSLSKSVTISVTSKQPSLKLSVTAADTAVVYVCARD- 120
QY 115 KEKVQLVFGLTANSPTHLQGSLLTLESPPGSSPSVQCRSPRGKNIQCG----- 166
DB 121 -----VGLRGNGTGMVDWGQGLTVTSSASTKGPSVFPPLAPSSKSTSGTALGCLV 172
QY 167 -----KTLVSYS-----QLELQDSG-----TWCTVYLNQ 190
DB 173 KDYFPEPVTVSMNSGALTSQVHTFPVAVLQSSGLYSLSSVTVPPSSSLGTQYICNV--NH 230
QY 191 KKVEFKIDYPCAPPEKSCDKTHTC-----PELLGSPSVFLPPPKKPDITMISRTPEVT 245
DB 231 KPSNTKYD---KRVBPKSCDKTHTCPCPAPPELLGSPSVFLPPPKKPDITMISRTPEVT 266
QY 246 CUVVDVSHEDPEVKFNNYVGVGHNAKTRPREQVNSTYRVSVLTVLHQMVLNGKEYK 305
DB 287 CUVVDVSHEDPEVKFNNYVGVGHNAKTRPREQVNSTYRVSVLTVLHQMVLNGKEYK 346
QY 306 CKVSNKALPAPIETKISKAKQPREPQVYTLTPPSRDELTKNQVSLTCLVKGFYPSDIAVE 365
DB 347 CKVSNKALPAPIETKISKAKQPREPQVYTLTPPSRDELTKNQVSLTCLVKGFYPSDIAVE 406
QY 366 WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQGVNFCGVHMEALHNHYTQKS 425
DB 407 WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQGVNFCGVHMEALHNHYTQKS 466
QY 426 LSLSPG 431
DB 467 LSLSPG 472

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RESULT 29
 US-09-740-002-27
 ; Sequence 27, Application US/09740002
 ; Patent No. 6537809
 ; GENERAL INFORMATION:
 ; APPLICANT: BRAMS, PETER
 ; APPLICANT: MORROW, PHILLIP
 ; TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES
 ; TITLE OF INVENTION: SPECIFIC TO RSV F-PROTEIN AND METHODS FOR THEIR
 ; FILE REFERENCE: 037003-0275759
 ; CURRENT APPLICATION NUMBER: US/09/740,002
 ; PRIOR FILING DATE: 2000-12-20
 ; PRIOR APPLICATION NUMBER: 09/335,697
 ; PRIOR FILING DATE: 1999-06-18
 ; PRIOR APPLICATION NUMBER: 08/488,376
 ; PRIOR FILING DATE: 1995-06-07
 ; NUMBER OF SEQ ID NOS: 27
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 27
 ; LENGTH: 475
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-740-002-27

Query Match 47.1%; Score 1273.5; DB 4; Length 475;
 Best Local Similarity 57.1%; Pred. No. 7.3e-91;
 Matches 276; Conservative 29; Mismatches 99; Indels 79; Gaps 11;

```

QY 10 LLLVLQALLPAAQGNKVVGLGKGDVLELTCTAS-----QKSIQPHMKNSNQIKL--- 62
DB 10 LVAAVAVLSQVQLQSSGRLVYKPTOTLTCTFSFSLSTRKMSVNWLRQPPKALEML 69
QY 63 ----GNQGSFELTKG-PSKLNDRADSRSLMDQGNPFLIKNLKIEDSDYICEVEDQKEE 117
DB 70 ARIDMDDTFYSAISLTKRLSISKDTSKN-----QVVLAMTNVDPVTATYFCARASLYDS 124
QY 118 VOLLVGLTRANSDLHLOGSLTLTLESPPGSSPSVQCSPKGNIQG----- 166
DB 125 DSFLYF-----YHAYWQGTIVTVSSASTKGPVFLPAPSKSTGGTAALGCLVXDY 177
QY 167 --KTLSSV-----QLELDGSG-----TWCTVLAQNKY 193
DB 178 FEPPTVVSANSGALITSGVHTFPAVLQSSGLISLVVTVPSSSLGITQYICNV--NHKES 235
QY 194 EFKIDIVPCPAPRPKSCDKTHTC-----PELLGSPVFLPFPKPKDTLMISRTPEVTCV 248
DB 236 NTKVD---KKAEPKSCDKTHTCPCPAPPELLGSPVFLPFPKPKDTLMISRTPEVTCV 291
QY 249 VDVSHEDEPVKFWYVDGVEVHNAKTKPREQYNSTYRVVSVLTITLHOMLNGKEYKCKV 308
DB 292 VDVSHEDEPVKFWYVDGVEVHNAKTKPREQYNSTYRVVSVLTITLHOMLNGKEYKCKV 351
QY 309 SNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMES 368
DB 352 SNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMES 411
QY 369 NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQGNVFCGVMEALHNYHTOKSLSL 428
DB 412 NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQGNVFCGVMEALHNYHTOKSLSL 471
QY 429 SPG 431
DB 472 SPG 474

```

RESULT 30
 US-09-499-846-6
 ; Sequence 6, Application US/09499846
 ; Patent No. 6656728
 ; GENERAL INFORMATION:

APPLICANT: Kavanaugh et al.
 ; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
 ; TITLE OF INVENTION: RECEPTOR-IMMUNOGLOBULIN FUSION
 ; FILE REFERENCE: 035784/195012 (5784-
 ; CURRENT APPLICATION NUMBER: US/09/499,846
 ; CURRENT FILING DATE: 2000-02-07
 ; NUMBER OF SEQ ID NOS: 12
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 6
 ; LENGTH: 497
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-499-846-6

Query Match 47.1%; Score 1273.5; DB 4; Length 497;
 Best Local Similarity 57.5%; Pred. No. 7.8e-91;
 Matches 276; Conservative 30; Mismatches 83; Indels 91; Gaps 12;

```

QY 15 QIALPAAQGNKVVGLGKGDVLELTCTASQKSIQPHW-KNSNQIK-----ILGNQGSFL 69
DB 45 KLHNVPA-----KTKPKCPSSGTPNPTLMLKNGKEFKDHRIGYKRVYA 92
QY 70 TKG-----PSKLNDRADSRSLMDQGNPFLIKNLKIEDSDYICEVEDQKEEVQLIV 122
DB 93 TWSIIMDSVPS-----DKGNVTCIYENEGYSINHVTQLDIVERSPHRPILQ 139
QY 123 FGLTRANSDLHLOGSLTLTLESPP-----GSS-----PSVQCRSPRGNV 163
DB 140 AGLPANKTVAGSNVEKCKYSDPQPHIQMLKHLVNGSKIGPNLPVQLKTAGVNT 199
QY 164 --QGKTLVSQLELDGSGTWTC-----TVLQNKKEFKIDIVPCP--- 203
DB 200 TDKMEVHLNRVSEDEGVEYTCLAGNSIGLSHSAMLTVE---ALBRPAMVMSPLYL 256
QY 204 -----APEPKSCDKTHTC-----PELLGSPVFLPFPKPKDTLMISRTPEVTCVVDV 251
DB 257 EGSGSPGLQEPKSCDKTHTCPCPAPPELLGSPVFLPFPKPKDTLMISRTPEVTCVVDV 316
QY 252 SHEDEPVKFWYVDGVEVHNAKTKPREQYNSTYRVVSVLTITLHOMLNGKEYKCKVSNK 311
DB 317 SHEDEPVKFWYVDGVEVHNAKTKPREQYNSTYRVVSVLTITLHOMLNGKEYKCKVSNK 376
QY 312 ALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNQ 371
DB 377 ALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNQ 436
QY 372 PENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQGNVFCGVMEALHNYHTOKSLSLSPG 431
DB 437 PENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQGNVFCGVMEALHNYHTOKSLSLSPG 496

```

RESULT 31
 US-09-499-846-4
 ; Sequence 4, Application US/09499846
 ; Patent No. 6656728
 ; GENERAL INFORMATION:
 ; APPLICANT: Kavanaugh et al.
 ; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
 ; TITLE OF INVENTION: RECEPTOR-IMMUNOGLOBULIN FUSION
 ; FILE REFERENCE: 035784/195012 (5784-
 ; CURRENT APPLICATION NUMBER: US/09/499,846
 ; CURRENT FILING DATE: 2000-02-07
 ; NUMBER OF SEQ ID NOS: 12
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 4
 ; LENGTH: 525
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-499-846-4

Query Match 47.1%; Score 1273.5; DB 4; Length 525;
 Best Local Similarity 57.5%; Pred. No. 8.4e-91;
 Matches 276; Conservative 30; Mismatches 83; Indels 91; Gaps 12;

Db 294 KKKRREQNSTYRVSVLTVLHODMLNGKEYCKKCVSNKALPAPIEKTISKAGPREQ 353
Qy 333 YVTLPPSRDELTKNOVSLTCLVKGFPSPDIABWESNGCPENNYKTPPVLDSDGSFFLY 392
Db 354 YVTLPPSRDELTKNOVSLTCLVKGFPSPDIABWESNGCPENNYKTPPVLDSDGSFFLY 413
Qy 393 SKLTVDSRWQGNVFSQVMEHALNHYTOKSLSPG 431
Db 414 SKLTVDSRWQGNVFSQVMEHALNHYTOKSLSPG 452

RESULT 34
US-08-487-550-12
; Sequence 12, Application US/08487550
; Patent No. 6113898
; GENERAL INFORMATION:
; APPLICANT: Anderson, Darrell R.
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
; STREET: 699 Prince Street
; CITY: Alexandria
; STATE: VA
; COUNTRY: USA
; ZIP: 22314
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/487,550
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Teskin, Robin L.
; REGISTRATION NUMBER: 35,030
; REFERENCE/DOCKET NUMBER: 012712-131
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6620
; TELEFAX: 703-836-2021
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 476 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-487-550-12

Query Match 47.0%; Score 1271; DB 3; Length 476;
Best Local Similarity 59.8%; Pred. No. 1.1e-90;
Matches 274; Conservative 29; Mismatches 87; Indels 68; Gaps 11;

Qy 30 LKKKGDVLTCTASQ--KKSIOFMKNSNOIKILGNOGSL-TKPSKLNDRADSRSS 85
Db 30 LVKPSFTLITCAVSGSISGCGWMIROPKGKLEWIGSFYSSGNTYVNPISLKSQVT 89
Qy 86 L--WDQGFPLIKLKIEDSTTYICEVEDQKEVQLLVFGITANSQDTHLLQGSLTIT 142
Db 90 ISTDSKNOFSLKLNMTADTAIVYYC-VRDLFSVVGWY--NNMFWDWGPGLVLT 143
Qy 143 LSPSPSSPVQCRSGRKNIOG-----KTLISV-----QLEL 176
Db 144 VSSASTKGPSVPLPABSSTSGTALGCLVQDYFPEPVYISMSNGALITGVHTFPANV 203
Qy 177 QDSG-----TWICTVLONOKRVEFKIDIVPCAPBPKSCDKTHTC-- 216
Db 204 QSSGLVSLSSVTVTPSSISGTQTYICNV--NHRKPSNTKVD---KKAEPKSCDKTHTCP 257

Qy 217 ---PELLGSPVFLPFPKCDTMIISRTPEYTCVVVDVSHEDPEYKFMNYYDGEVHNAX 273
Db 258 CPAPELGSPVFLPFPKCDTMIISRTPEYTCVVVDVSHEDPEYKFMNYYDGEVHNAX 317
Qy 274 TKPREQNSTYRVSVLTVLHODMLNGKEYCKKCVSNKALPAPIEKTISKAGPREQV 333
Db 318 TKPREQNSTYRVSVLTVLHODMLNGKEYCKKCVSNKALPAPIEKTISKAGPREQV 377
Qy 334 YVTLPPSRDELTKNOVSLTCLVKGFPSPDIABWESNGCPENNYKTPPVLDSDGSFFLYS 393
Db 378 YVTLPPSRDELTKNOVSLTCLVKGFPSPDIABWESNGCPENNYKTPPVLDSDGSFFLYS 437
Qy 394 KLTVDKSRWQGNVFSQVMEHALNHYTOKSLSPG 431
Db 438 KLTVDKSRWQGNVFSQVMEHALNHYTOKSLSPG 475

RESULT 35
US-09-526-098-12
; Sequence 12, Application US/09526098
; Patent No. 6492134
; GENERAL INFORMATION:
; APPLICANT: Anderson, Darrell R.
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
; STREET: 699 Prince Street
; CITY: Alexandria
; STATE: VA
; COUNTRY: USA
; ZIP: 22314
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/526,098
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/383,916
; FILING DATE:
; APPLICATION NUMBER: US 08/487,550
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Teskin, Robin L.
; REGISTRATION NUMBER: 35,030
; REFERENCE/DOCKET NUMBER: 012712-131
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6620
; TELEFAX: 703-836-2021
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 476 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-09-526-098-12

Query Match 47.0%; Score 1271; DB 4; Length 476;
Best Local Similarity 59.8%; Pred. No. 1.1e-90;
Matches 274; Conservative 29; Mismatches 87; Indels 68; Gaps 11;

Qy 30 LKKKGDVLTCTASQ--KKSIOFMKNSNOIKILGNOGSL-TKPSKLNDRADSRSS 85
Db 30 LVKPSFTLITCAVSGSISGCGWMIROPKGKLEWIGSFYSSGNTYVNPISLKSQVT 89

```

Qy 86 L---WDGNFPLIKLKIEDSDTYICEVEDQEEVQLVFGLTANSDFHLQOQSLLTT 142
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1STDSKNOFSLKLNMTADTAVYC-VRDRLFSSVGMVY-----NNWFDVWGGLVLT 143
Qy 143 LESPSSPSVQCRSPRGKNIQGG-----KTLSSVS-----OLEL 116
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 144 VSSASTKGFVFLPAPSSKSTSGTALGCLVKDYFPEPTVSNNSGALTSGVHTFPVAVL 203
Qy 177 QDSG-----TWCTVLQNOCKVEFKIDIVPCPAPSPKCDKTHTC-- 216
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 204 QSSGLVSLSSVWVTPSSSLGTQYICNV--NHKPSNTKVD---KKAEPSSCDKTHTCPP 257
Qy 217 ---PELLGSPSVLFPKPKDPTLMIISRTPEVTCVVDVSHEDPEVKENWYDGEVNAK 273
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 258 CPAPELLGSPSVLFPKPKDPTLMIISRTPEVTCVVDVSHEDPEVKENWYDGEVNAK 317
Qy 274 TKREEDYNSTYRVSVLTVLHODWLNKKEYCKCVSKALPAPIEKTISAKGQPREPOV 333
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 318 TKREEDYNSTYRVSVLTVLHODWLNKKEYCKCVSKALPAPIEKTISAKGQPREPOV 377
Qy 334 YTLPPSRDELTKQOVSLTCLVKGFYPSDIAVEMESNGQPENNYKTPPVLDSDGSFPLYS 393
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 378 YTLPPSRDELTKQOVSLTCLVKGFYPSDIAVEMESNGQPENNYKTPPVLDSDGSFPLYS 437
Qy 394 KLTVDKSRMOQGNVFCSCVNHGALHNHYTQKSLSLSPG 431
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 438 KLTVDKSRMOQGNVFCSCVNHGALHNHYTQKSLSLSPG 475

```

```

RESULT 36
US-09-485-737B-67
; Sequence 67, Application US/09485737B
; Patent No. 6350860
; GENERAL INFORMATION:
; APPLICANT: Buysse, Marie-Ange
; APPLICANT: Sablon, Erwin
; TITLE OF INVENTION: INTERFERON-gamma-BINDING MOLECULES FOR TREATING SEPTIC SHOCK,
; FILE REFERENCE: INNS:015
; CURRENT APPLICATION NUMBER: US/09/485, 737B
; PRIOR FILING DATE: 2000-02-14
; PRIOR APPLICATION NUMBER: PCT/EP 98/05165
; PRIOR FILING DATE: 1998-08-14
; PRIOR APPLICATION NUMBER: EPO 98870139.7
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: EPO 97870122.5
; PRIOR FILING DATE: 1997-08-18
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 67
; LENGTH: 468
; TYPE: PRF
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: SYNTHETIC
US-09-485-737B-67

```

```

Query Match 46.8%; Score 1265.5; DB 4; Length 468;
Best Local Similarity 57.2%; Pred. No. 3e-90;
Matches 277; Conservative 31; Mismatches 79; Indels 97; Gaps 13;

Qy 11 LVLQLALLPAATQGNKVVVGKKGDVLELTCTASQKSIQFHKNSNOIKILNQGSLFLT 70
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 17 VILSQVQLVQSGS-----LKKPGASVKISCKAS---GYTFDYGNMWNVQAPQG--L 65
Qy 71 KGPSKLNDRADSRSLMD--QGNFP-----LIINKLKIEDSDTYICEVEDQKEEV 118
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 66 KMGWINTYTGESTYVDKGRFVFLSDTSVAAYLIQISSLKAEDTATYFC----- 116
Qy 119 QLLVFGLTANSDFHLQ--GQSLTLTLESPGSSPSVQCRSPRGKNIQGG----- 166
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 117 -----ARRGFAMDYMGCGTTTVVSSASTKGFVFLPAPSSKSTSGTALGCLVKD 168

```

```

Qy 167 ---KTLSSVS-----OLELQDSG-----TWCTVLQNOCK 192
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 169 YFPEPTVSNNSGALTSGVHTFPVAVLQSSGLVSLSSVWVTPSSSLGTQYICNV--NHK 226
Qy 193 VERKIDIVPCPAPSPKCDKTHTC-----PELLGSPSVLFPKPKDPTLMIISRTPEVTCV 247
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 227 SNTKVD-----KRAVEPKSCDKTHTCPPCPAPPELLGSPSVLFPKPKDPTLMIISRTPEVTCV 282
Qy 248 VVDVSHEDPEVKENWYDGEVNAKTKPREEDYNSTYRVSVLTVLHODWLNKKEYCK 307
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 283 VVDVSHEDPEVKENWYDGEVNAKTKPREEDYNSTYRVSVLTVLHODWLNKKEYCK 342
Qy 308 VSNKALPAPIEKTISAKGQPREPOVYTLPPSRDELTKQOVSLTCLVKGFYPSDIAVEME 367
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 343 VSNKALPAPIEKTISAKGQPREPOVYTLPPSRDELTKQOVSLTCLVKGFYPSDIAVEME 402
Qy 368 SNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRMOQGNVFCSCVNHGALHNHYTQKSL 427
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 403 SNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRMOQGNVFCSCVNHGALHNHYTQKSL 462
Qy 428 LSPG 431
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 463 LSPG 466

```

```

RESULT 37
US-09-485-737B-90
; Sequence 90, Application US/09485737B
; Patent No. 6350860
; GENERAL INFORMATION:
; APPLICANT: Buysse, Marie-Ange
; APPLICANT: Sablon, Erwin
; TITLE OF INVENTION: INTERFERON-gamma-BINDING MOLECULES FOR TREATING SEPTIC SHOCK,
; FILE REFERENCE: INNS:015
; CURRENT APPLICATION NUMBER: US/09/485, 737B
; PRIOR FILING DATE: 2000-02-14
; PRIOR APPLICATION NUMBER: PCT/EP 98/05165
; PRIOR FILING DATE: 1998-08-14
; PRIOR APPLICATION NUMBER: EPO 98870139.7
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: EPO 97870122.5
; PRIOR FILING DATE: 1997-08-18
; NUMBER OF SEQ ID NOS: 104
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 90
; LENGTH: 711
; TYPE: PRF
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: SYNTHETIC
US-09-485-737B-90

```

```

Query Match 46.8%; Score 1265.5; DB 4; Length 711;
Best Local Similarity 57.2%; Pred. No. 5.4e-90;
Matches 277; Conservative 31; Mismatches 79; Indels 97; Gaps 13;

Qy 11 LVLQLALLPAATQGNKVVVGKKGDVLELTCTASQKSIQFHKNSNOIKILNQGSLFLT 70
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 17 VILSQVQLVQSGS-----LKKPGASVKISCKAS---GYTFDYGNMWNVQAPQG--L 65
Qy 71 KGPSKLNDRADSRSLMD--QGNFP-----LIINKLKIEDSDTYICEVEDQKEEV 118
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 66 KMGWINTYTGESTYVDKGRFVFLSDTSVAAYLIQISSLKAEDTATYFC----- 116
Qy 119 QLLVFGLTANSDFHLQ--GQSLTLTLESPGSSPSVQCRSPRGKNIQGG----- 166
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 117 -----ARRGFAMDYMGCGTTTVVSSASTKGFVFLPAPSSKSTSGTALGCLVKD 168
Qy 167 ---KTLSSVS-----OLELQDSG-----TWCTVLQNOCK 192
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 169 YFPEPTVSNNSGALTSGVHTFPVAVLQSSGLVSLSSVWVTPSSSLGTQYICNV--NHK 226

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QY 173 -OELQDSG-----TWCTVLQONKVEFKIDIVPCAPBPKSCDKT 213
      |||
      175 FPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNV--NHKPSNTKYD-----KKVEPKSCDKT 228
QY 214 HTC-----PELGGSPSFLPEPKKDTLMTSRTEPTCVVVDVSHEDPEVKFMVYDGV 268
      |||
      229 HTCPCPAPBELLGGPSVFLPEPKKDTL--ISRTPEVTCVVVDVSHEDPEVKFMVYDGV 287
QY 269 VHAUKTPREBOVNSTRVVSVLTVLHODMLNGKEYCKVSNKALPAPIEKTISKAKGP 328
      |||
      288 VHAUKTPREBOVNSTRVVSVLTVLHODMLNGKEYCKVSNKALPAPIEKTISKAKGP 347
QY 329 REPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSGS 388
      |||
      348 REPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSGS 407
QY 389 FFLYSKLTVDKSRWQGNVFCSCVMHEALHNHTYQKSLSLSPG 431
      |||
      408 FFLYSKLTVDKSRWQGNVFCSCVMHEALHNHTYQKSLSLSPG 450

```

```

RESULT 40
US-09-466-635-3
; Sequence 3, Application US/09466635
; Patent No. 6413514
; GENERAL INFORMATION:
; APPLICANT: Aruffo, Alejandro A.
; APPLICANT: Stedak, Anthony W.
; APPLICANT: Berry, Karen K.
; APPLICANT: Harris, Linda
; APPLICANT: Thorne, Barbara A.
; APPLICANT: Bajorek, Jergen
; TITLE OF INVENTION: ANTIBODIES AGAINST HUMAN CD40
; FILE REFERENCE: DB2 SEQUENCE
; CURRENT APPLICATION NUMBER: US/09/466,635
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 3
; LENGTH: 451
; TYPE: PRT
; ORGANISM: Human and Mouse
US-09-466-635-3

```

```

Query Match 46.8%; Score 1264; DB 4; Length 451;
Best Local Similarity 59.6%; Pred. No. 3.7e-90;
Matches 276; Conservative 23; Mismatches 80; Indels 84; Gaps 13;

QY 30 LGKKGDTVELTCTASOKKSIQFHKNSNOIKILGNOSFLLTKGPSKLNDRADRSRLMD- 88
      |||
      11 LKPGETVRISCKAS--GYAFTTGMQWQEMPGK--LKIIGWINTHSGVPKYVEDF 64
QY 89 QGNFP-----LIINKLKIEDSDTYICEVEDQKEEVQLVFGLTANSPTHLLOQ 137
      |||
      65 KGRFAPSELSANTAYLQISNLKNEDEATYFC--VRSNGVYDLAFY-----YWGQ 114
QY 138 SLTLTLESPPGSSPVOCRRPKGNIOG-----KTLVS----- 172
      |||
      115 GLTVTSMASTKGSVPFLAPSSKSTSGTALGCLVKDYFPEPVTVTSNMGALTSQVHT 174
QY 173 -OELQDSG-----TWCTVLQONKVEFKIDIVPCAPBPKSCDKT 213
      |||
      175 FPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNV--NHKPSNTKYD-----KKVEPKSCDKT 228
QY 214 HTC-----PELGGSPSFLPEPKKDTLMTSRTEPTCVVVDVSHEDPEVKFMVYDGV 268
      |||
      229 HTCPCPAPBELLGGPSVFLPEPKKDTL--ISRTPEVTCVVVDVSHEDPEVKFMVYDGV 287
QY 269 VHAUKTPREBOVNSTRVVSVLTVLHODMLNGKEYCKVSNKALPAPIEKTISKAKGP 328
      |||
      288 VHAUKTPREBOVNSTRVVSVLTVLHODMLNGKEYCKVSNKALPAPIEKTISKAKGP 347

```

```

QY 329 REPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSGS 388
      |||
      348 REPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSGS 407
QY 389 FFLYSKLTVDKSRWQGNVFCSCVMHEALHNHTYQKSLSLSPG 431
      |||
      408 FFLYSKLTVDKSRWQGNVFCSCVMHEALHNHTYQKSLSLSPG 450

```

```

RESULT 41
US-09-027-449-71
; Sequence 71, Application US/09027449
; Patent No. 6025158
; GENERAL INFORMATION:
; APPLICANT: Gonzalez, Tania R.
; APPLICANT: Leong, Steven R.
; APPLICANT: Presta, Leonard G.
; TITLE OF INVENTION: Antibody Fragment-Polymer Conjugates and
; NUMBER OF SEQUENCES: 72
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080

```

```

COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 Inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Winpatin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/027,449
FILING DATE: 20-Feb-1998
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/074,330
FILING DATE: 22-Jan-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/038,664
FILING DATE: 21-Feb-1997
ATTORNEY/AGENT INFORMATION:
NAME: Love, Richard B.
REGISTRATION NUMBER: 34,659
REFERENCE/DOCKET NUMBER: P1085R3-2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-5530
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 71:
SEQUENCE CHARACTERISTICS:
LENGTH: 452 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
US-09-027-449-71

```

```

Query Match 46.8%; Score 1263.5; DB 3; Length 452;
Best Local Similarity 59.6%; Pred. No. 4.1e-90;
Matches 273; Conservative 26; Mismatches 86; Indels 73; Gaps 11;

QY 30 LGKKGDTVELTCTAS--QKKSIOFHKNSNOIKILGNOSF--LTKGPSKLNDRADRSRL 86
      |||
      11 LVOPGSLRLSCASISYSSHYMHWROAPGKLEWVGVIIDPSNGETTYNQFKGRFTL 70
QY 87 W--DOGNFPLIINKLKIEDSDTYICEVEDQKEEVQLVFGLTANSPTHL--LQGSGLTLT 142
      |||
      71 SRNSNNTAYLQNSLRADDTAYYCARGDYR-----YNDWDFDVGQGTLT 119
QY 143 LBSPPGSSPVOCRRPKGNIOG-----KTLVS-----QLEL 176
      |||
      120 VSSASTKGSVPFLAPSSKSTSGTALGCLVKDYFPEPVTVTSNMGALTSQVHTPAVL 179
QY 177 QDSG-----TWCTVLQONKVEFKIDIVPCAPBPKSCDKTHTC-- 216

```

Db 180 QSSGLYSLSSVTVTPSSSLGTQTYICNV--NHKPSNTKVD----KKEVEKSCDKHTHTCP 233
QY 217 ---PELLGSPSVFLFPFKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNAK 273
Db 234 CPAPELLGSPSVFLFPFKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNAK 293
QY 274 TKPREQVNSTYRKYVSVLTVLHODMLNGEKYCKVSNKALPAPIETKISKAKGQPREPOV 333
Db 294 TKPREQVNSTYRKYVSVLTVLHODMLNGEKYCKVSNKALPAPIETKISKAKGQPREPOV 353
QY 334 YTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYS 393
Db 354 YTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYS 413
QY 394 KLTVDKSRMQQGNVFSQVMHEALHNHYTQKSLSLSPG 431
Db 414 KLTVDKSRMQQGNVFSQVMHEALHNHYTQKSLSLSPG 451

RESULT 42

US-09-026-985-71
; Sequence 71, Application US/09026985
; Patent No. 6133426
; GENERAL INFORMATION:
; APPLICANT: Gonzalez, Tania R.
; APPLICANT: Presta, Leonard G.
; TITLE OF INVENTION: Antibody Fragment-Polymer Conjugates and
; TITLE OF INVENTION: Humanized Anti-IL-8 Monoclonal Antibodies
; NUMBER OF SEQUENCES: 72
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Winpatin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/026,985
; FILING DATE: 20-Feb-1998
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Love, Richard B.
; REGISTRATION NUMBER: 34,659
; REFERENCE/DOCKET NUMBER: P1085R3-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-5530
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 71:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 452 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
US-09-026-985-71

Query Match 46.8%; Score 1263.5; DB 3; Length 452;
Best Local Similarity 59.6%; Pred. No. 4,1e-90;
Matches 273; Conservative 26; Mismatches 86; Indels 73; Gaps 11;
QY 30 LGKKGDTVELTCTAS--OKSKIOPHKNSNOIKILNGQSF--LTGKPSKLNDRADSRSL 86
Db 11 LVPGGSLSLSCAASGYSSSHMHVVRQAPGKLEWGVYDPSNGETTYNKKFKRFTL 70
QY 87 W---DQGNPLIITKLIKEDSDTYICEVEDQKEEVLVGLTANSDTLH--LOGSLTLT 142
Db 71 SRDNSKNTAYLVQNMNLSRAEDTAVYYCARGDYR-----YNDMDFPDVWGQGLTAVT 119

QY 143 LESPSPSSVQCRPRGKNIQGG-----KTLSSV-----QLEL 176
Db 120 VSSASTKSPSVPLPAPSSKSTSGTALACLVKYDFFPEPVYVSNKSGALTSQVHTPPAVL 179
QY 177 QDSG-----TWCTVLQNOQKVEFKIDIVPCAPAPKSCDKHTHTC-- 216
Db 180 QSSGLYSLSSVTVTPSSSLGTQTYICNV--NHKPSNTKVD----KKEVEKSCDKHTHTCP 233
QY 217 ---PELLGSPSVFLFPFKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNAK 273
Db 234 CPAPELLGSPSVFLFPFKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNAK 293
QY 274 TKPREQVNSTYRKYVSVLTVLHODMLNGEKYCKVSNKALPAPIETKISKAKGQPREPOV 333
Db 294 TKPREQVNSTYRKYVSVLTVLHODMLNGEKYCKVSNKALPAPIETKISKAKGQPREPOV 353
QY 334 YTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYS 393
Db 354 YTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYS 413
QY 394 KLTVDKSRMQQGNVFSQVMHEALHNHYTQKSLSLSPG 431
Db 414 KLTVDKSRMQQGNVFSQVMHEALHNHYTQKSLSLSPG 451

RESULT 43

US-09-121-952A-71
; Sequence 71, Application US/09121952A
; Patent No. 6458355
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc., Hseil, Vanessa
; APPLICANT: Konenka, Iphigenia
; APPLICANT: Leong, Steven R.
; APPLICANT: Presta, Leonard G.
; APPLICANT: Shatrokh, Zahra
; APPLICANT: Zapata, Gerardo A.
; TITLE OF INVENTION: METHODS OF TREATING INFLAMMATORY DISEASES
; TITLE OF INVENTION: WITH ANTI-IL-8 ANTIBODY FRAGMENT-POLYMER CONJUGATES
; NUMBER OF SEQUENCES: 72
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Winpatin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/121,952A
; FILING DATE: 24-Jul-1998
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/074330
; FILING DATE: 22-JAN-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/075467
; FILING DATE: 20-FEB-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Love, Richard B.
; REGISTRATION NUMBER: 34,659
; REFERENCE/DOCKET NUMBER: P1085R4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-5530
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 71:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 452 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear

US-09-121-952A-71

Query Match 46.8%; Score 1263.5; DB 4; Length 452;

Best Local Similarity 59.6%; Pred. No. 4,1e-90; Indels 73; Gaps 11;

Matches 273; Conservative 26; Mismatches 86; Indels 73; Gaps 11;

QY 30 LGKKGDTVELTCTAS--QKKSIOFHWNKSNQIKILGNQGSF-LTKGPSKLNDRADSRSL 86
 DB 11 LVQPGSLRLSCAASGVSPSSHVMHWROAPGKLEWVGVIDPSNGETTYNQFKGRFTL 70
 QY 87 W---DQGNFPLIIKNLKIEDSDTYICEVEDQKEVOLLVFGLTANSPTHL-LOGOSITLT 142
 DB 71 SRDNSKNTAYLQWNSLRABDTAVYYCARGDYR-----YNGDWFFDVWGQGTLYT 119
 QY 143 LESPSPSSVQCRSPRGKNIQGS-----KTLVS-----QLEL 126
 DB 120 VSSASTKGSPVFPLAESSKSTSGSTALGCLVKDYRPEPTVSNMGALTSVHTTTPAVL 179
 QY 177 QDSG-----TWCTVLQONKKEFKIDIVCPAPEPKSCDKTHTC-- 216
 DB 180 QSSGLVSLSSVTVTPSSSLGTQTYICNV--NHKPSNTKVD---KKEPKSCDKTHTCRP 233
 QY 217 ---PELLGSPVFLFPKPKDITLMISRTPEVTCVVDVSHEDPEVKFNMTVDGEVHNK 273
 DB 234 CPAPELLGSPVFLFPKPKDITLMISRTPEVTCVVDVSHEDPEVKFNMTVDGEVHNK 293
 QY 274 TKREBOYNSTYRVSVLTVLHODMNGKCKVSNKALPAPIEKTISKAKQPREPOV 333
 DB 294 TKREBOYNSTYRVSVLTVLHODMNGKCKVSNKALPAPIEKTISKAKQPREPOV 353
 QY 334 YTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYS 333
 DB 354 YTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYS 413
 QY 394 KLTVDKSRWQGNVFCSCVMHEALHNHYTQKSISLSPG 431
 DB 414 KLTVDKSRWQGNVFCSCVMHEALHNHYTQKSISLSPG 451

RESULT 44
 US-09-234-340A-71
 / Sequence 71, Application US/09234340A
 / Patent No. 6468532
 / GENERAL INFORMATION:
 / APPLICANT: Genentech, Inc., Hesel, Vanessa
 / APPLICANT: Leoung, Steven R.
 / APPLICANT: Preata, Leonard G.
 / APPLICANT: Shahrokh, Zahra
 / APPLICANT: Zapata, Gerardo A.
 / TITLE OF INVENTION: METHODS OF TREATING INFLAMMATORY DISEASES
 / TITLE OF INVENTION: WITH ANTI-IL-8 ANTIBODY FRAGMENT-POLYMER CONJUGATES
 / NUMBER OF SEQUENCES: 72
 / CORRESPONDENCE ADDRESS:
 / ADDRESSEE: Genentech, Inc.
 / STREET: 1 DNA Way
 / CITY: South San Francisco
 / STATE: California
 / COUNTRY: USA
 / ZIP: 94080
 / COMPUTER READABLE FORM:
 / MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
 / OPERATING SYSTEM: PC-DOS/MS-DOS
 / SOFTWARE: MapEdit (Genentech)
 / CURRENT APPLICATION DATA:
 / APPLICATION NUMBER: US/09/234,340A
 / FILING DATE:
 / CLASSIFICATION:
 / PRIOR APPLICATION DATA:
 / APPLICATION NUMBER: US/09/121,952
 / FILING DATE: 24-Jul-1998
 / APPLICATION NUMBER: 60/074330

/ FILING DATE: 22-JAN-1998
 / PRIOR APPLICATION DATA:
 / APPLICATION NUMBER: 60/075467
 / FILING DATE: 20-FEB-1998
 / ATTORNEY/AGENT INFORMATION:
 / NAME: Love, Richard B.
 / REGISTRATION NUMBER: 34,659
 / REFERENCE/DOCKET NUMBER: P1085R4
 / TELECOMMUNICATION INFORMATION:
 / TELEPHONE: 650/225-5530
 / TELEFAX: 650/952-9881
 / INFORMATION FOR SEQ ID NO: 71:
 / SEQUENCE CHARACTERISTICS:
 / LENGTH: 452 amino acids
 / TYPE: Amino Acid
 / TOPOLOGY: Linear
 / US-09-234-340A-71

Query Match 46.8%; Score 1263.5; DB 4; Length 452;
 Best Local Similarity 59.6%; Pred. No. 4,1e-90;
 Matches 273; Conservative 26; Mismatches 86; Indels 73; Gaps 11;

QY 30 LGKKGDTVELTCTAS--QKKSIOFHWNKSNQIKILGNQGSF-LTKGPSKLNDRADSRSL 86
 DB 11 LVQPGSLRLSCAASGVSPSSHVMHWROAPGKLEWVGVIDPSNGETTYNQFKGRFTL 70
 QY 87 W---DQGNFPLIIKNLKIEDSDTYICEVEDQKEVOLLVFGLTANSPTHL-LOGOSITLT 142
 DB 71 SRDNSKNTAYLQWNSLRABDTAVYYCARGDYR-----YNGDWFFDVWGQGTLYT 119
 QY 143 LESPSPSSVQCRSPRGKNIQGS-----KTLVS-----QLEL 126
 DB 120 VSSASTKGSPVFPLAESSKSTSGSTALGCLVKDYRPEPTVSNMGALTSVHTTTPAVL 179
 QY 177 QDSG-----TWCTVLQONKKEFKIDIVCPAPEPKSCDKTHTC-- 216
 DB 180 QSSGLVSLSSVTVTPSSSLGTQTYICNV--NHKPSNTKVD---KKEPKSCDKTHTCRP 233
 QY 217 ---PELLGSPVFLFPKPKDITLMISRTPEVTCVVDVSHEDPEVKFNMTVDGEVHNK 273
 DB 234 CPAPELLGSPVFLFPKPKDITLMISRTPEVTCVVDVSHEDPEVKFNMTVDGEVHNK 293
 QY 274 TKREBOYNSTYRVSVLTVLHODMNGKCKVSNKALPAPIEKTISKAKQPREPOV 333
 DB 294 TKREBOYNSTYRVSVLTVLHODMNGKCKVSNKALPAPIEKTISKAKQPREPOV 353
 QY 334 YTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYS 333
 DB 354 YTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYS 413
 QY 394 KLTVDKSRWQGNVFCSCVMHEALHNHYTQKSISLSPG 431
 DB 414 KLTVDKSRWQGNVFCSCVMHEALHNHYTQKSISLSPG 451

RESULT 45
 US-09-301-593-30
 / Sequence 30, Application US/09301593A
 / Patent No. 6455677
 / GENERAL INFORMATION:
 / APPLICANT: Park, John E.
 / APPLICANT: Garin-Chesa, Pilar
 / APPLICANT: Bamberger, Uwe
 / APPLICANT: Leiger, Olivier
 / APPLICANT: Saldanha, Jose W.
 / APPLICANT: Rettig, Wolfgang J.
 / TITLE OF INVENTION: PAP-specific Antibody with Improved Productivity
 / FILE REFERENCE: 0652.1890001
 / CURRENT APPLICATION NUMBER: US/09/301,593A
 / FILING DATE: 1999-04-29
 / EARLIER APPLICATION NUMBER: EP 98107925.4
 / EARLIER FILING DATE: 1998-04-30
 / EARLIER APPLICATION NUMBER: US 60/086,049

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; EALIER FILING DATE: 1998-05-18
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 30
; LENGTH: 472
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-301-553-30
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Query Match	46.7%	Score 1263;	DB 4;	Length 472;
Best Local Similarity	59.0%;	Pred. No. 4.7e-90;		
Matches 271;	Conservative 31;	Mismatches 83;	Indels 74;	Gaps 13

QY	30	LGKGGTVELTCTAASOKSIQF--HHKSNQJIKILNGQSF-LTGPSEKINDRADSRSL	86
Db	30	LVRGASVAKMSCTSTSYTFTETIHHVRSOHKSLEMIIGGINPNNGIIPNYQKFKGATL	89
QY	87	W--DQGNPPLAIKNLIKEDSDPTYICEVEDQKEVQLLVFGLTANSDTHLQ--GQSLTL	141
Db	90	TVGKSSSTAMELRSLTSEDSAYFC-----ARRIAYGY--DEGHADYWGQSTV	139
QY	142	TLESPGSSSPVOCRRPRKNIQGG-----KTLVS-----QLE	175
Db	140	TVSSST-KGSPVPLPAPSSKSTSGGTAALGCLVKDYPPRPVTVSNNSGALTSVHTPPAV	198
QY	176	LQSG-----TWTCVLQNOKVFEKIDIPCPAPRPSCDHTTC-	216
Db	199	LQSSGLYLSVVTVPSSSLGQTYICNV--HHKSNKVD---KKYEPSCDKTHCP	254
QY	217	----PELLGSPSYFLFPPPKDQTLMSRTPRYTCVVDVSHEDPVRKKNVYDGEVYNA	272
Db	253	PCBAPELTGPSPVFLFPPPKDQTLMSRTPRYTCVVDVSHEDPVRKKNVYDGEVYNA	312
QY	273	KTRPREHOVNSTRAWVSVLTVLHODMLNKEKCKCKVSKNKAIPAREKTIISAKGOPREPQ	332
Db	313	KTRPREQVNSTRAWVSULTVLHODMLNKEKCKCKVSKNKAIPAREKTIISAKGOPREPQ	372
QY	333	VYTLPPSRDELTYNQVSLTCLVKGYPSDIAVEMESNQPPENNYKTPRPVLVDSGSPFLY	392
Db	373	VYTLPPSRDEMTNQVSLTCLVKGYPSDIAVEMESNQPPENNYKTPRPVLVDSGSPFLY	432
QY	393	SKLTVDKSRWQGNVSCSVMEHALNHNTHQSLSLSP	431
Db	433	SKLTVDKSRWQGNVSCSVMEHALNHNTHQSLSLSP	471

RESULT 46
 US-08-887-352B-18
 Sequence 18 Application US/08887352B
 Patent No. 5994511
 GENERAL INFORMATION:
 APPLICANT: Henry B. Lowman, Leonard G. Presta, Paula M. Jardieu, John Lowe
 TITLE OF INVENTION: Improved Anti-TGE Antibodies and Method of
 TITLE OF INVENTION: Improving Polypeptides
 NUMBER OF SEQUENCES: 26
 CORRESPONDENCE ADDRESSES:
 ADDRESSEE: Genentech, Inc.
 STREET: 1 DNA Way
 CITY: South San Francisco
 STATE: California.
 COUNTRY: USA
 ZIP: 94080
 COMPUTER READABLE FORM:
 MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Winpacin (Genentech)
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/887,352B
 FILING DATE: 03-Jul-1997
 CLASSIFICATION: 530
 ATTORNEY/AGENT INFORMATION:
 NAME: Svoboda, Craig G.

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1 REGISTRATION NUMBER: 39,044
2
3 REFERENCE/DOCKET NUMBER: P11222
4
5 TELECOMMUNICATION INFORMATION:
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7 TELEPHONE: 650/225-1489
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9 TELEFAX: 650/952-9881
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11 INFORMATION FOR SEQ ID NO: 18:
12
13 SOURCE CHARACTERISTICS:
14
15 LENGTH: 451 amino acids
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17 TYPE: amino acid
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19 TOPOLOGY: Linear
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Query Match	46.7%;	Score 1262;	DB 2;	Length 451;
Best Local Similarity	58.6%;	Pred. No. 5.3e-90;		
Matches 273;	Conservative 25;	Mismatches 78;	Indels 90;	Gaps 12

Qy	30	LGKKGTVLTTCTAQ-----KSGIQHNNKSNQIQILNQSGFLTKGSKLN-----	77
Db	11	LVNPGGSLRLSCAVSGVSTTSGYSNMNLRQAPGKLEWVNASIKVSGEKKNPVSXGRITL	70
Qy	78	DRADSRSLMDQGNFPLIINKLKIEDSTPYICEVDEQKEVQLLVFGLTANDSTH---LL	134
Db	71	SRDSSKNTFTYLMN-----SLRAEDTAVVYCCARGSH-----YFG-----HMFHV	110
Qy	135	QGGSLTLTLESPGSSPSVQCSRPBGKRIQGG-----KTLSSVS-----	172
Db	111	WGGGLTVTVSSASTGSPVFPLAPBSKSTSGGTALGLVQDYPERPEVTVSNMSGALTSG	170
Qy	173	----OLELDDSG-----TWCTVLONQKVEFKIDIVCPRAPEKSC	210
Db	171	VHNFPAVLQSSGLYSLSVTVPPSSLSLTQYIYICNV--NHKPSMTKYD----KKEVEKSC	224
Qy	211	DKTHTC-----PELLGGSPVFLFPKPKDMLMISTRTPEVTVVVDVSHEDPEVKFNNYVD	265
Db	225	DKTHTCPCPAPBELLGGSPVFLFPKPKDMLMISTRTPEVTVVVDVSHEDPEVKFNNYVD	284
Qy	266	GVEVNAHAKTRPREBOYNSTRVYVSLTVLHODMLNGEKYCKVSNKRLPAPIETKISKAK	325
Db	285	GVEVNAHAKTRPREBOYNSTRVYVSLTVLHODMLNGEKYCKVSNKRLPAPIETKISKAK	344
Qy	326	GQPREQVYTLPPSDELTKNQVSLTCLVKGFYPSDIAVEMESNGORENNYKTTTPVYLDS	385
Db	345	GQPREQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEMESNGORENNYKTTTPVYLDS	404
Qy	386	DGSFFLYSKLTVDKSRMOQGNVFCSSVNHDLAHNHYQKSLSLSPG	431
Db	405	DGSFFLYSKLTVDKSRMOQGNVFCSSVNHDLAHNHYQKSLSLSPG	450

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RESULT 47
US-09-109-207C-18
; Sequence 18. Application US/09109207C
; Patent No. 617213
; GENERAL INFORMATION:
; APPLICANT: Henry B. Lowman, Leonard G. Presta, Paula M. Jardieu, John Lowe
; TITLE OF INVENTION: Improved Anti-IGS Antibodies and Method of Improving Polypeptide
; FILE REFERENCE: P113R1
; CURRENT APPLICATION NUMBER: US/09/109,207C
; CURRENT FILING DATE: 1998-06-30
; PRIOR APPLICATION NUMBER: US 60/051,554
; PRIOR FILING DATE: 1997-07-03
; NUMBER OF SEQ ID NOS: 44
; SEQ ID NO 18
; LENGTH: 451
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; NAME/KEY: Artificial
; LOCATION: 1-451
; OTHER INFORMATION: Heavy chain sequence derived from MAE11
US-09-109-207C-18
Query Match 46.7%; Score 1262; DB 3; Length 451;

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Best Local Similarity 58.6%; Pred. No. 5.3e-90;
Matches 273; Conservative 25; Mismatches 78; Indels 90; Gaps 12;

QY 30 LGKKGDTVELTCTASQ---KKSIOFHMKNSNOIKILGNQGSFLTKGPKSKN----- 77
DB 11 LVPGGSLRLSCAVSGYSITSGYSNMWIRQAPKGLEWVASIKYSGETKYNPSVKGRITI 70
QY 78 DRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEVQLLVFGLTANSPTH---LL 134
DB 71 SRDSSKNTFTYQWN-----SLRAEDTAVYYCARGSH-----YFG-----HMHFAV 110
QY 135 OGQSLTFLTESPPGSSPSVQCRRSPGKNIOGG-----KTLSSVS----- 172
DB 111 WGGGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAAAGCLVKDYFPEPVYVSNMNSGALTSG 170
QY 173 ----QLELDSG-----TWCTVLQONOKVFEKIDIVPCAPAPKSC 210
DB 171 VHTFPAVLQSSGLYSLSVVTVPSSSLGTQTYICNV--NHKPSNTKYD---KVEPKSC 224
QY 211 DKHTHC-----PELLGSPVFLFPKPKDITMISRTPEVTCVVDVSHEDPEVKFMWYVD 265
DB 225 DKHTHCPCAPAPPELLGSPVFLFPKPKDITMISRTPEVTCVVDVSHEDPEVKFMWYVD 284
QY 266 GVEVHNAKTPREEOYNSTYRVVSVLTVLHODMLNKEVKCKVSNKALPAPIEKTISKAK 325
DB 285 GVEVHNAKTPREEOYNSTYRVVSVLTVLHODMLNKEVKCKVSNKALPAPIEKTISKAK 344
QY 326 GQREPOVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAEWESNGOPENNYKTTTPVLDS 385
DB 345 GQREPOVYTLPPSRREMTKNQVSLTCLVKGFYPSDIAEWESNGOPENNYKTTTPVLDS 404
QY 386 DGSFPLYSKLTVDKSRMOQGNVFCGVMHEALHNHTOKSLSPG 431
DB 405 DGSFPLYSKLTVDKSRMOQGNVFCGVMHEALHNHTOKSLSPG 450

RESULT 48
US-09-282-505-2
; Sequence 2, Application US/09282505A
; Patent No. 6194551
; GENERAL INFORMATION:
; APPLICANT: Esche Ekinadese Idusogie et al.
; TITLE OF INVENTION: Polypeptide Variants
; FILE REFERENCE: P1266R1
; CURRENT APPLICATION NUMBER: US/09/282,505A
; CURRENT FILING DATE: 1999-03-31
; NUMBER OF SEQ ID NOS: 2
; SEQ ID NO 2
; LENGTH: 451
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: Artificial Sequence
; LOCATION: 1-451
; OTHER INFORMATION: Sequence is completely synthesized
; Patent No. 6194551
US-09-282-505-2

Query Match 46.7%; Score 1262; DB 3; Length 451;
Best Local Similarity 58.6%; Pred. No. 5.3e-90;
Matches 273; Conservative 25; Mismatches 78; Indels 90; Gaps 12;

QY 173 ----QLELDSG-----TWCTVLQONOKVFEKIDIVPCAPAPKSC 210
DB 171 VHTFPAVLQSSGLYSLSVVTVPSSSLGTQTYICNV--NHKPSNTKYD---KVEPKSC 224
QY 211 DKHTHC-----PELLGSPVFLFPKPKDITMISRTPEVTCVVDVSHEDPEVKFMWYVD 265
DB 225 DKHTHCPCAPAPPELLGSPVFLFPKPKDITMISRTPEVTCVVDVSHEDPEVKFMWYVD 284
QY 266 GVEVHNAKTPREEOYNSTYRVVSVLTVLHODMLNKEVKCKVSNKALPAPIEKTISKAK 325
DB 285 GVEVHNAKTPREEOYNSTYRVVSVLTVLHODMLNKEVKCKVSNKALPAPIEKTISKAK 344
QY 326 GQREPOVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAEWESNGOPENNYKTTTPVLDS 385
DB 345 GQREPOVYTLPPSRREMTKNQVSLTCLVKGFYPSDIAEWESNGOPENNYKTTTPVLDS 404

RESULT 49
US-09-054-255-2
; Sequence 2, Application US/09054255
; Patent No. 6242195
; GENERAL INFORMATION:
; APPLICANT: Esche Ekinadese Idusogie et al.
; TITLE OF INVENTION: Polypeptide Variants
; FILE REFERENCE: P1266
; CURRENT APPLICATION NUMBER: US/09/054,255
; CURRENT FILING DATE: 1998-04-02
; NUMBER OF SEQ ID NOS: 2
; SEQ ID NO 2
; LENGTH: 451
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: E27 anti-IgE antibody heavy chain
US-09-054-255-2

Query Match 46.7%; Score 1262; DB 3; Length 451;
Best Local Similarity 58.6%; Pred. No. 5.3e-90;
Matches 273; Conservative 25; Mismatches 78; Indels 90; Gaps 12;

QY 30 LGKKGDTVELTCTASQ---KKSIOFHMKNSNOIKILGNQGSFLTKGPKSKN----- 77
DB 11 LVPGGSLRLSCAVSGYSITSGYSNMWIRQAPKGLEWVASIKYSGETKYNPSVKGRITI 70
QY 78 DRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEVQLLVFGLTANSPTH---LL 134
DB 71 SRDSSKNTFTYQWN-----SLRAEDTAVYYCARGSH-----YFG-----HMHFAV 110
QY 135 OGQSLTFLTESPPGSSPSVQCRRSPGKNIOGG-----KTLSSVS----- 172
DB 111 WGGGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAAAGCLVKDYFPEPVYVSNMNSGALTSG 170
QY 173 ----QLELDSG-----TWCTVLQONOKVFEKIDIVPCAPAPKSC 210
DB 171 VHTFPAVLQSSGLYSLSVVTVPSSSLGTQTYICNV--NHKPSNTKYD---KVEPKSC 224
QY 211 DKHTHC-----PELLGSPVFLFPKPKDITMISRTPEVTCVVDVSHEDPEVKFMWYVD 265
DB 225 DKHTHCPCAPAPPELLGSPVFLFPKPKDITMISRTPEVTCVVDVSHEDPEVKFMWYVD 284
QY 266 GVEVHNAKTPREEOYNSTYRVVSVLTVLHODMLNKEVKCKVSNKALPAPIEKTISKAK 325
DB 285 GVEVHNAKTPREEOYNSTYRVVSVLTVLHODMLNKEVKCKVSNKALPAPIEKTISKAK 344
QY 326 GQREPOVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAEWESNGOPENNYKTTTPVLDS 385
DB 345 GQREPOVYTLPPSRREMTKNQVSLTCLVKGFYPSDIAEWESNGOPENNYKTTTPVLDS 404

OY		386 DGSFLLSKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPG	431
Dd		405 DGSSFLYSKLTVDKSRWQGNVFSCSMHEALNHHYTQKSLSLSPG	450

```

RESULT 50
US-09-296-005-18
; Sequence 18, Application US/09296005
; Patent No. 6290957
; GENERAL INFORMATION:
; APPLICANT: Henry B. Lowman, Leonard G. Presta, Paula M. Jardiou, John Lowe
; TITLE OF INVENTION: Improved Anti-IgE Antibodies and Method of Improving Polypeptides
; FILE REFERENCE: P1123C1r
; CURRENT APPLICATION NUMBER: US/09/296,005
; CURRENT FILING DATE: 1999-04-21
; EARLIER APPLICATION NUMBER: US 08/887,352
; EARLIER FILING DATE: 1997-07-02
; NUMBER OF SEQ ID NOS: 26
; SEQ ID NO 18
; LENGTH: 451
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: Artificial
; LOCATION: 1-451
; OTHER INFORMATION: Heavy chain sequence derived from MAE11
US-09-296-005-18

```

Query March	46.7%;	Score 1262;	DB 3;	Length 451;
Best Local Similarity	58.6%;	Pred. No. 5.3e-90;		
Matches 273;	Conservative 25;	Mismatches 78;	Indels 90;	Gaps 12

```

OY 30 GKAKDYTELTCTTAS- --KKSIOFWKNSNOIKILGNOSFLTKPSKLN----- 77
Db 11 LVQPGSLRLSCAVSGYSITSGYSMMWIMQAPKGLBMAVASYKYSBETKXNPSVGRITI 70
OY 78 DRABSRSLMDQGNFPLIKNLEIBSDPTICEVEOQKEVOLLVGLTANSDTH--LL 134
Db 71 SRDSEKNTFFLOMN-----SLRAEDTAVYYCARGSH-----YFG-----HMFAY 110
OY 135 OGQSLTTLTLESPGSPSVQCSPPROKNIOGG-----TLTSLVS----- 172
Db 111 WQGGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGLCYKDYFPERPVYVNMNSGALTSG 170
OY 173 ---OLEIODSG-----TWCTVLONQKVEFKIDIVCPAPRPKSC 210
Db 171 VHTPRAVLQSSGLYSLSSVTVTPSSSLGTQTYICNV--NHKPSNTRKVD----KKEVEPKSC 224
OY 211 DKTHHC-----PELLAGSPVFLPRPKPKDTLMISRPPEYTCVVDVSHEDPEVKFMWYVD 255
Db 225 DKTHHCPCPAPABELLGGPSVFLPRPKPKDTLMISRPPEYTCVVDVSHEDPEVKFMWYVD 284
OY 266 GVEVHNAAKTPRBEQOYNSTRYVSVYTVLTHODMLNKEKYCKVSNYKLPAPIEKTISKAK 325
Db 285 GVEVHNAAKTPRBEQOYNSTRYVSVYTVLTHODMLNKEKYCKVSNYKLPAPIEKTISKAK 344
OY 326 GQPREPQVYTLTPSRDELTKNOVSLTCLVKGFPYPSDIAVEMESNGQPRENNYKTTTPVLDS 365
Db 345 GQPREPQVYTLTPSRREMTKNQVSLTCLVKGFPYPSDIAVEMESNGQPRENNYKTTTPVLDS 404
OY 366 DGSFFLYSKLTVDKSRWQCGNPFSCVMEHDAALHNHTOKSLSPG 431
Db 405 DGSFFLYSKLTVDKSRWQCGNPFSCVMEHDAALHNHTOKSLSPG 450

```

RESULT 51
US-09-282-846-2
Sequence 2, Application US/092828246
; Patent No. 6528624
; GENERAL INFORMATION:
; APPLICANT: Escho Ekinaduse Idusogie et al
; TITLE OF INVENTION: Polypeptide Variants
; FILE REFERENCE: P1268R2

```

; CURRENT APPLICATION NUMBER: US/09/282,846
; CURRENT FILING DATE: 1999-03-31
; NUMBER OF SEQ ID NOS: 2
; SEQ ID NO 2

```

Query Match	46.7%	Score 1262;	DB 4;	Length 451;
Best Local Similarity	58.6%	Pred. No. 5.3e-90;		
Matches 273; Conservative	25;	Mismatches 78;	Indels 90;	Gaps 12.

QY	30	GGKGDYELCTCTASQ----	KXSIOGHMKNSNOIKILGNQGSFETKTPSKLN-----	77	
Db	11	LVQPGGSLRLCSAVSGYSITSGYSMMNLRQAGKGLWVAWSIKYSETTKYNSVKGRIT	70		
QY	78	DRADRSRLMDQGNFPLIIKNLIKIEDSDTYICEVEDQKEEVOLLVGLTANSDTH--	LL 134		
Db	71	SRDSSKNFFYQMN-----	SLRADTAVVYCARGSH-----	YFG-----	HHMFAY 110
QY	135	QGQSLTTLLESPGSSPSVQCRSPGKNIQGG-----	KTLSYS-----	172	
Db	111	WGQGLTVVSSASTKGPVSPFLAPSPKSTSGGTALGCLVKOYFPBPVTVSNNSGALTSG	170		
QY	173	-----QLELODSG-----	TWTCYVLONQKVEFKIDIVPCBAPBPKSC	210	
Db	171	VHTPFAVLQSSGLVSLSSVTVPPSSSLGHTGYICNV--	NHKR9NTKVD----	KKVEPKSC 224	
QY	211	DKHTTC-----	PELLGSPSVFLPFPKPKDTLMSIRPEVTCVYVDVSHEDPEVKFNMYYVD	265	
Db	225	DKHTHCPCBPAPBELLGSPSVFLPFPKPKDTLMSIRPEVTCVYVDVSHEDPEVKFNMYYVD	284		
QY	266	GVEVYNAATKTPREBOYNSYTYRVVSLTVLTHQOMLNGKEKCKVSNKALPAPIEKTISKAK	325		
Db	285	GVEVYNAATKTPREBOYNSYTYRVVSLTVLTHQOMLNGKEKCKVSNKALPAPIEKTISKAK	344		
QY	326	GQPREPQVYTLPPSRDELTKQVSLTCLVKGFYPSDIAVEMESNGCPENNYKTTTPVLDS	385		
Db	345	GQPREPQVYTLPPSRDEMTKQVSLTCLVKGFYPSDIAVEMESNGCPENNYKTTTPVLDS	404		
QY	386	DGSFPLYSKLTVDKSRMOQGNVFSQVWHEALHNHTQSLSLSPG	431		
Db	405	DGSFPLYSKLTVDKSRMOQGNVFSQVWHEALHNHTQSLSLSPG	450		

```

RESULT 52
US-09-680-145-2
: Sequence 2, Application US/09680145
: Patent No. 6538124
: GENERAL INFORMATION:
: APPLICANT: Esocle Ekinaduese Idusogie et al.
: TITLE OF INVENTION: Polypeptide Variants
: FILE REFERENCE: P1266R1
: CURRENT APPLICATION NUMBER: US/09/680,145
: CURRENT FILING DATE: 2000-10-03
: PRIOR APPLICATION NUMBER: 09/282,505
: PRIOR FILING DATE: 1999-03-13
: NUMBER OF SEQ ID NOS: 2
: SEQ ID NO 2
: LENGTH: 451
: TYPE: PRT
: ORGANISM: Artificial Sequence
: FEATURE:
: NAME/KEY: Artificial Sequence
: LOCATION: 1-451
: OTHER INFORMATION: Sequence is completely synthesized
: Patent NO. 6538124

```

US-09-680-145-2

Query Match 46.7%; Score 1262; DB 4; Length 451;
Best Local Similarity 58.6%; Pred. No. 5.3e-90;
Matches 273; Conservative 25; Mismatches 78; Indels 90; Gaps 12;

QY 30 LGKKGDTVELTCTASQ---KKSIOFHWNKSNQIKILGNQGSFLTGPSKLN-----77
DB 11 LVPGGSLRLSCAVSGSITSGYSMMWIRQAPGKGLWVASIKSGSTKTNPSVKRITI 70
QY 78 DRADSRRLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEVQLLVFGLTANSPTH---LL 134
DB 71 SRDSSKNTFYLQWN-----SLRAEDTAYVYCARGSH-----YFG-----HMHFAV 110
QY 135 QGQSLTLTLESPPGSSPSVQCRSPRGKNIQGG-----KTLSSV-----172
DB 111 WGGGTLVTSSASTKGPSPVPLAPSSKSTSGGTALGCLVKDYFPEPVTVSNMNSGALTSG 170
QY 173 ---QLELDQSG-----TWTCVLQONQKVEFKIDIVPCAPPEPKSC 210
DB 171 VHTFPVAVLOSSGLYSLSVTVTPSSSLGTQTYICNV--NHKPSNTKVD---KVEPKSC 224
QY 211 DKHTHTC-----PELLGSPVFLPFPKPKDTLMSRTEPVTCVVVDVSHEDPEVKFMNYVD 265
DB 225 DKHTHTCPCPAPPELLGSPVFLPFPKPKDTLMSRTEPVTCVVVDVSHEDPEVKFMNYVD 284
QY 266 GVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAK 325
DB 285 GVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAK 344
QY 326 GQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTTPVLDS 385
DB 345 GQPREPOVYTLPPSRDEMTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTTPVLDS 404
QY 386 DGSFFLYSKLTVDKSRMQGNVFCSCVMHEALHNHYTQKSLSLSPG 431
DB 405 DGSFFLYSKLTVDKSRMQGNVFCSCVMHEALHNHYTQKSLSLSPG 450

RESULT 53

US-09-920-171-18
Sequence 18, Application US/09920171
Patent No. 6682735
GENERAL INFORMATION:
APPLICANT: Lowman, Henry B.
APPLICANT: Presta, Leonard G.
APPLICANT: Jardiou, Paula M.
APPLICANT: Lowe, John
TITLE OF INVENTION: Improved Anti-Ige Antibodies (as amended)
FILE REFERENCE: P1123C2US
CURRENT APPLICATION NUMBER: US/09/920.171
CURRENT FILING DATE: 2001-08-01
PRIOR APPLICATION NUMBER: US 08/887,352
PRIOR FILING DATE: 1997-07-02
PRIOR APPLICATION NUMBER: US 09/236,005
PRIOR FILING DATE: 1999-04-21
NUMBER OF SEQ ID NOS: 44
SEQ ID NO 18
LENGTH: 451
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Heavy chain sequence derived from MAE11
US-09-920-171-18

Query Match 46.7%; Score 1262; DB 4; Length 451;
Best Local Similarity 58.6%; Pred. No. 5.3e-90;
Matches 273; Conservative 25; Mismatches 78; Indels 90; Gaps 12;

QY 30 LGKKGDTVELTCTASQ---KKSIOFHWNKSNQIKILGNQGSFLTGPSKLN-----77
DB 11 LVPGGSLRLSCAVSGSITSGYSMMWIRQAPGKGLWVASIKSGSTKTNPSVKRITI 70

QY 78 DRADSRRLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEVQLLVFGLTANSPTH---LL 134
DB 71 SRDSSKNTFYLQWN-----SLRAEDTAYVYCARGSH-----YFG-----HMHFAV 110
QY 135 QGQSLTLTLESPPGSSPSVQCRSPRGKNIQGG-----KTLSSV-----172
DB 111 WGGGTLVTSSASTKGPSPVPLAPSSKSTSGGTALGCLVKDYFPEPVTVSNMNSGALTSG 170
QY 173 ---QLELDQSG-----TWTCVLQONQKVEFKIDIVPCAPPEPKSC 210
DB 171 VHTFPVAVLOSSGLYSLSVTVTPSSSLGTQTYICNV--NHKPSNTKVD---KVEPKSC 224
QY 211 DKHTHTC-----PELLGSPVFLPFPKPKDTLMSRTEPVTCVVVDVSHEDPEVKFMNYVD 265
DB 225 DKHTHTCPCPAPPELLGSPVFLPFPKPKDTLMSRTEPVTCVVVDVSHEDPEVKFMNYVD 284
QY 266 GVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAK 325
DB 285 GVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAK 344
QY 326 GQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTTPVLDS 385
DB 345 GQPREPOVYTLPPSRDEMTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTTPVLDS 404
QY 386 DGSFFLYSKLTVDKSRMQGNVFCSCVMHEALHNHYTQKSLSLSPG 431
DB 405 DGSFFLYSKLTVDKSRMQGNVFCSCVMHEALHNHYTQKSLSLSPG 450

RESULT 54

US-09-049-672A-8
Sequence 8, Application US/09049672A
Patent No. 6135941
GENERAL INFORMATION:
APPLICANT: Hillman, Jennifer L.
APPLICANT: Lal, Preeti
APPLICANT: Tang, Y. Tom
APPLICANT: Yue, Henry
APPLICANT: Au-Young, Janice
APPLICANT: Corley, Neil C.
APPLICANT: Guegler, Karl J.
APPLICANT: Baughn, Mariah R.
TITLE OF INVENTION: HUMAN IMMUNE SYSTEM ASSOCIATED PROTEINS
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSQ for windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/049.672A
FILING DATE: HEREWITH
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Cerrone, Michael C
REGISTRATION NUMBER: 39,132
REFERENCE/DOCKET NUMBER: Pf-0497.US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
TELEFAX: 650-845-4166
TELEX:
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:

```

; LENGTH: 467 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; LIBRARY: LUNGTU11
; CLONE: 2747531
;
US-09-049-672A-8

```

Query Match	46.7%;	Score 1261.5;	DB 3;	Length 467;
Best Local Similarity	55.6%;	Pred. No. 6.1e-90;		
Matches 278;	Conservative 24;	Mismatches 73;	Indels 125;	Gaps 14.

```

Qy 16 LALLPATOGNKV-----LGKKGDVLELTAS--OKKSIOFHN-----53
Db 8 LPLVAATGTHAQVQLVOSGAEVKKRKGASVYCSVTSGPFLSDLSVHNVRQAPQGLEMM 67
Qy 54 -----KNSNOI---KILNQSGFLTKGPKSLANDRADRSRLMDQNFLLIKNLIKIDSD 105
Db 68 GGLAPEPGEAVNAOKFLGR---LTLSEDTADTA-----YMLNINSGSDSA 111
Qy 106 TYICEVEDQKEVQLVLFGLTANSPTHL-----LQGSULTLLESPPGSSPYOCRSRPG 160
Db 112 IYYC-----ARQHYDFFPDPMQGMVMTVASATKGSVFPPLAPSS 152
Qy 161 KNIOGG-----KTLSSVS-----OLEIODSG-----180
Db 153 KSTSGGPAALGCLVKQYFPEPPIVSNNSGALTSGVHTPEPAVLQSSGLYSLSSVTVBSSS 212
Qy 181 ----TWTCVLOXOKKVEFKIDVPCPAPEPKSCDKHTC-----PELLGSPSVFLPPK 231
Db 213 LGQTYICNV--NHKSNTKVD---KKYEPKSCDKHTCCPCAPPELLGSPSVFLPPK 266
Qy 232 PKDTLMISRTPEVTCVAVDVSHDEPEVKFNMYVDGVEYNAKTKPREFQYNSTRVAVSL 291
Db 267 PKDTLMISRTPEVTCVAVDVSHDEPEVKFNMYVDGVEYNAKTKPREFQYNSTRVAVSL 326
Qy 292 TVLHOMLNKEKCKVSNKALPAPLEKTIISKAKOPREPOVYTLPPSRDELTLKNQVSLT 351
Db 327 TVLHOMLNKEKCKVSNKALPAPLEKTIISKAKOPREPOVYTLPPSRDELTLKNQVSLT 386
Qy 352 CLVKGFPSPDIAVEMESNGQPENNYKTPTEPVLDSQGSFFLYSKLTVDSRMOQGNVPSCS 411
Db 387 CLVKGFPSPDIAVEMESNGQPENNYKTPTEPVLDSQGSFFLYSKLTVDSRMOQGNVPSCS 446
Qy 412 VMHEALHNHTOKSLSLSPG 431
Db 447 VMHEALHNHTOKSLSLSPG 466

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RESULT 55
US-09-499-846-12
: Sequence 12, Application US/09499846
: Patent No. 6656728
: GENERAL INFORMATION:
: APPLICANT: Kavanaugh et al.
: TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
: FILE OF INVENTION: RECEPTOR-IMMUNOGLOBULIN FUSION
: TITLE REFERENCE: 035784/195012 (5784-
: CURRENT APPLICATION NUMBER: US/09/499,846
: CURRENT FILING DATE: 2000-02-07
: NUMBER OF SEQ ID NOS: 12
: SOFTWARE: FastSeq for Windows Version 3.0
: SEQ ID NO 12
: LENGTH: 488
: TYPE: PRT
: ORGANISM: Homo sapiens
US-09-499-846-12

```

Query Match	46.7%;	Score 1261;	DB 4;	Length 488;
Best Local Similarity	57.9%;	Pred. No. 7.1e-90;		
Matches 272;	Conservative 30;	Mismatches 88;	Indels 80;	Gaps 11

```

0Y 0LALLPATOQGNKVLGKGJIVELCTJASQCKSLIOFHW-KNSNQIKILIGQOSFLTJGK 73
15
Db 45 KJHAWPAA-----KTVKFKCPS8SGRPNTPLRWLKNQKEXKPHRIGGYKV--- 89
0Y 74 SKLNDRADRSRLW-----DQGNPLIIKULKIEDSDTJICEVEDQKEEVLVLF 123
Db 90 -----RAYATWIIINDSVPSDKGNVTCIYENEGYSINHTYQJLDVYERSPHRILQA 140
0Y 124 GLTANSDTHLLQCGQSLVLTLESPP-----GSS-----PSVOC8SPRGKNI- 163
Db 141 GLPAAKTYVALG8NVEFMCKVYSDFQPHIOMLKHIEVNSKIGEDBNLPYQJILTAGVNTT 2000
0Y 164 -QGGKTL8VSQLELQD8G7WTG-----TVLONQKVEFKIDIVPCPA-PE 206
Db 201 DKEMEVLLHRNV8FEDAGBYTCLAGNSIGLSH8SAWLVYLE--ALE8PAVMT8PLYLE 257
0Y 207 PKSCDKTHTC-----PELLG8PSVLLPFPKPKOTLMI8TTPETVTCVVDVSH8DEPVKEN 261
Db 258 PKSCDKTHTCP8PAPELGG8SVFLPFPKPKOTLMI8TTPETVTCVVDVSH8DEPVKEN 317
0Y 262 WYVD8VEYHNAKTKRE8QYN8TVV8SVLTVJLHODMLNGKEKCYK8V8NALPAP1EKT1 321
Db 318 WYVD8VEYHNAKTKRE8QYN8TVV8SVLTVJLHODMLNGKEKCYK8V8NALPAP1EKT1 377
0Y 322 SKAKQ8PREPOUYTL8PS8DELTKQV8ITCLVKGFYPSDIAV8W88NGQ8PENNYKTTTP 381
Db 378 SKAKQ8PREPOUYTL8PS8DELTKQV8ITCLVKGFYPSDIAV8W88NGQ8PENNYKTTTP 437
0Y 382 VLD8G88F8LY8KLV8DK8RWQ8Q8V88CSV8H8ALH8NYTQ8LSL8P8 431
Db 438 VLD8G88F8LY8KLV8DK8RWQ8Q8V88CSV8H8ALH8NYTQ8LSL8P8 487

```

```

US-08-466-151-8
/ Sequence 8, Application US/08466151
/ Patent No. 6037453
/ GENERAL INFORMATION:
/ APPLICANT: Jardieu, Paula M.
/ APPLICANT: Presta, Leonard G.
/ TITLE OF INVENTION: Immunoglobulin Variants
/ NUMBER OF SEQUENCES: 65
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Genentech, Inc.
/ STREET: 1 DNA Way
/ CITY: South San Francisco
/ STATE: California
/ COUNTRY: USA
/ ZIP: 94080
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: WinpatIn (Genentech)
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/466,151
/ FILING DATE:
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 08/466163
/ FILING DATE: 06-Jun-1995
/ APPLICATION NUMBER: 08/405617
/ FILING DATE: 15-MAR-1995
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 08/185899
/ FILING DATE: 26-JAN-1994
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 07/879495
/ FILING DATE: 07-MAY-1992
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 07/744768
/ FILING DATE: 14-AUG-1991
/ ATTORNEY/AGENT INFORMATION:

```